2 7991 .287 .287

100 b

THE ZOOLOGICAL RECORD

VOLUME 97 SECTION 6 1960

THE UNIVERSITY OF THICKIGAN MAR 26 1965 MUSEUMS LIBRARY

## **VERMES**

COMPILED BY

STEPHEN PRUDHOE

LONDON
PUBLISHED BY
THE ZOOLOGICAL SOCIETY OF LONDON

PRICE TWELVE SHILLINGS
1963

It will greatly help in the production of The Zoological Record and assist the Recorders of the individual sections, if authors will forward a copy of their paper or memoir to the Editor of the Zoological Record, The Zoological Society of London, Regent's Park, London, N.W.1. In the case of separately printed copies of articles so forwarded, the original pagination should be given.

All business correspondence concerning the Record should be addressed to the Scientific Director, The Zoological Society of London, Regent's Park, London, N.W.1.

#### THE MUSEUMS JOURNAL

Published by the Museums Association 22 Fitzroy Street, Fitzroy Square, London, W.1.

This journal, which is published monthly, contains articles, reviews and technical notes on every Museum aspect of zoology and other sciences. It is the only English journal which deals with the installation and preservation of exhibits, and which reviews Museum work in all parts of the world.

It is published monthly price 4s., by the Association and can be obtained from the above address. It is distributed free to all members of the Museums Association (Subscription £3 3s. 0d. per annum), of which full particulars are obtainable from the Secretary at the above address.

# **VERMES**

COMPILED BY

STEPHEN PRUDHOE

Vol. 97

© Zoological Society of London, 1963

## 6. VERMES

COMPILED BY

#### STEPHEN PRUDHOE

#### CONTENTS

									PAGE
TITLES (for all groups)		• •		••	••		• •	••	5
1	PLAT	YHELMI	NTHES,	NEMER	TINEA,	MESOZ	OA		
Subject Index			••		••	• •	••	••	47
Systematic Index		••	••	••	••	••	••	••	54
		1	NEMATI	HELMIN	THES				
Subject Index				• •		••			63
Systematic Index	••	••		••	••	••	••	••	68
ROTIFER	A, GA	STROT	RICHA,	ECHINO	DERID	а, снав	TOGNA	ТНА	
SUBJECT INDEX			• •			• • •	••		75
Systematic Index		••	••	••		••		••	76
ANNI	ELIDA	, GEPH	YREA, C	ONODO	NTA, S	COLECO	DONTA		
Subject Index	• •					**			77
Systematic Index					••				80
Vol., 97								f	1-2

6. VERMES

28

to

E 3

S

B

O

in

bool

hinyP

minutary margines

#### I.-TITLES

### In the list of titles the year has been omitted where it is the same as the volume year of the "Record," namely (1960).

Anon. (1). Professor José Manoel Ruiz 5.II.1913 + 28.V.1959. Mem. Inst. Butantan 29: 3-8 portr.

Anon. (2). British Caenozoic fossils 1959: 1-130 44 pls. B.M. (N.H.) London.

Abbott, B. J. A note on the oxygen and temperature tolerances of the triclads *Phagocata gracilis* (Haldeman) and *Dugesia tigrina* (Girard). Va J. Sci. n.s. 11: 1-8.

Ablasov, N. A. see Gagarin, V. G.

Ábrahám, A., Biczók, F. & Megyeri, J. Vergleichende faunistische Untersuchungen in den Kleingewässern des Bükk-Gebirges. Acta biol. Szeged n.s. 5 1959: 201–214.

Adams, J. E. & Martin, W. E. Life history of Himasthla sp., an echinostome trematode. J. Parasit. 46 5 Sect. 2: 15. [Abstract].

Adams, J. E. see Martin, W. E.

Adams, J. R. see Prakash, A.

Agapova, A. I. Parasites of fish in the water-reservoirs of Kustanaisk Province. Trud. Inst. Zool. Alma-Ata 12: 195-205. [In Russian].

Agapova, A. I. & Maksimova, A. P. Parasites of fish of the water-reservoirs of the Southern Kazakhstan. Trud. Inst. Zool. Alma-Ata 14: 71-87.

Agapova, A. I. see Gvozdev, E. V.

Agarwal, S. M. Studies on a new species of the genus Echinoparyphium (Dietz, 1909) (Trematoda: Echinostomatidae). Bull. Soc. zool. Fr. 84 1959 [1960]: 322-329 4 figs.

Agosin, M. Bioquimica de Echinococcus granulosus. Biológica, Santiago Nos. 27-28 1959: 3-32 16 figs. [English & German summaries].

Ahlberg, O. Introductory lecture. Nematologica Suppl. II: 1-5.

Ahluwalia, S. S. see Malik, B. S.

Ahluwalia, S. S. see Pande, B. P.

Albertová, O. Eine neue Art der Gattung Polyarthra (Rotatoria). Mém. Soc. zool. tchécosl. 24: 16-18

Ali, S. M. (1). On two new species of *Procamallanus* Baylis, 1923 from India, with a key to the species. J. Helminth. **34**: 129-138 10 figs.

All, S. M. (2). On some new species of the genus Oxyspirura from birds in Hyderabad, Andhra Pradesh, India. J. Helminth. 34: 221-242 28 figs.

Ali, S. M. see Amir, S.

Alicata, J. E. Importance and treatment of Cooperia infection of calves in Hawaii. Proc. Hawaii Acad. Sci. No. 35: 19.

Alicata, J. E. & Ching, H. L. On the infection of birds and mammals with the cercaria and metacercaria of the eye-fluke, *Philophthalmus*. J. Parasit. 46 5 Sect. 2: 16. [Abstract].

Alicata, J. E. & Noda, K. Observations on the life history of *Philophthalmus*, a species of eye-fluke of birds in Hawaii. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D. F. (Instituto Politecnico Nacional): 67–73 4 figs.

Allen, R. W. & Samson, K. S. Further observations on Thysanosoma actinioides in the American pronghorn. J. Parasit. 46: 671.

Allgén, C. A. Antarktische meistens neue freilebende marine Nematoden aus dem Graham-Land. Zool. Anz. 164: 474-499 30 figs.

Allen, M. W. see Maggenti, A. R.

Allen, R. W. see Gilmore, R. G.

Almeido Prado, M. S. de (1). Sôbre alguns Chaetognatha das águas brasileiras. An. Acad. bras. Cienc. 31: 597-598.

Almeldo Prado, M. S. de (2). A new species of Sagitta, from the southern Brazilian coast. An. Acad. bras. Cienc. 32: 275-280 4 figs.

Altherr, E. (1). Results from the Danish Expedition to the French Cameroons (1949–1950). XXVIII.– Nématodes limnicoles. Bull. Inst. franç. Afr. noire 22A: 770–787 8 figs.

Altherr, E. (2). Rhabditis guenini n. sp. Bull. Soc. vaud. Sci. nat. 67: 211-214 2 figs.

Ameel, D. J. see Cort, W. W.

Amir, S. & Ali, S. M. On a new species of Splendidofilaria Skrjabin, 1923 from India. J. Helminth. 34: 139-140 6 figs.

An der Lan, H. Dendrocoelopsis spinosipensis (Kenk) aus Jugoslavien und Schweden sowie Digonoporus macroposthia An der Lan (Turbellaria Tricladida Paludicola). Zool. Anz. 165 : 403–406.

Anderson, D. T. Ariciid polychaetes in Australia. Proc. Linn. Soc. N.S.W. 85: 105-106.

Anderson, M. G. An anomaly in a proglottid o Taenia pisiformis Bloch, 1782. J. Parasit. 46: 154.

Anderson, R. C. (1). Preliminary revision of the genus Diplotriaena Henry and Ozoux, 1909 (Diplotriaenidae: Diplotriaeninae). Parassit., Roma 1 1959: 195-307 29 figs.

Anderson, R. C. (2). The study of Filaria martis Gmelin, 1790 from Martes foina and Pedetes caffer. Canad. J. Zool. 38: 157-167 21 figs.

Anderson, R. C. (3). The origin of the protuberance on the inner surface of the egg capsule of *Cystidicola cristivomeri*. Canad. J. Zool. 38: 257-260 12 figs.

Anderson, R. C. (4). Correction to a previous paper. Canad. J. Zool. 38: 677.

Anderson, R. C. (5). On the development and transmission of Cosmocercoides dukae of terrestrial molluscs in Ontario. Canad. J. Zool. 38: 801–825 35 figs.

Anderson, R. C. & Bennett, G. F. Eufilaria mcintoshi, n. sp. from Padda oryzivora (L.). Proc. helminth. Soc. Wash. 27: 113-115 8 figs.

Anderson, R. I. see Oliver-Gonzalez, J.

Anderson, R. I. see Sadun, E. H.

Andrássy, I. (1). Süsswasser-Nematoden aus Französisch-West-Afrika. Opusc. Zool. Budapest 1 1956: 1–18 17 figs.

[

E

Un

gna

ach

Flo

Ne

le

le

((

Andrássy, I. (2). Deladenus aridus n. sp. und ein Wiederfund von Deladenus saccatus Andrássy, 1954. Nematologische Notizin 5. Opusc. Zool. Budapest 2 1957: 3–8 9 figs.

Andrássy, I. (3). Thomia gubernaculifera n. sp., ein neuer Süsswassernematode aus Ungarn. Nematologische Notizen 6. Opusc. Zool. Budapest 2 1957: 9–14 5 fürs.

Andrássy, I. (4). Die Mundhöhlentypen der Mononchiden und der Schlüssel der Mylonchulus-Arten (Nematoda). Opusc. Zool. Budapest 3 1959 : 3–12 11 figs.

Andrássy, I. (5). Dorylaimus holdemani n. sp., eine neue Nematoden-Art aus Bulgarien. Opusc. Zool. Budapest 3 1959: 13-17 2 figs.

Andrássy, I. (6). Nematoden aus dem Psammon des Adige-Flusses, I. Mem. Mus. Stor. nat. Verona 7 1959: 163–181 5 figs.

Andrássy, I. (7). Zwei bemerkenswerte Nematoden-Arten aus Belgisch-Kongo. Opusc. Zool. Budapest 3: 101-110 3 figs.

Andrássy, I. (8). Nematologische Notizen, 8. Opusc. Zool. Budapest 3: 111-116 2 figs.

Andrássy, I. (9). Einige Nematoden aus Afghanistan. Opusc. Zool. Budapest 4: 3-14 6 figs.

Andrássy, I. (10). Panagrobelus topayi n. sp., eine neue Nematoden-Art aus Kenya. Zool. Anz. 164: 195-201 1 fig.

Andrássy, I. (11). Beiträge zur Kenntnis der freilebenden Nematoden Chinas. Ann. Hist. nat. Mus. hung. 52: 201–216 2 figs.

[Andreeva, E. M. & others]. [Atlas of the leading forms of the fossil fauna and flora of the Permian layers of the Kuznetz Basin]: 1-411 60 pls. Moskva 1956.

Andreeva, N. K. see Shultz, R. S.

Angel, L. M. Cercaria haswelli Dollfus, 1927; a re-examination of Haswell's material, with discussion of the genus Tergestia. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 75-86 10 figs.

Ansari, M. N. A. see Lall, B. S.

Arandas Rego, A. Nota prévia sôbre uma nova espécie do genero *Monoecocestus* Beddard, 1914. Atas Soc. Biol. Rio Jan. 4: 67-68.

Arnold, H. Terebella lutensis Bather (Annel.) in der Münsterländer Oberkreide. Paläont. Z. 30, Sonderheft 1956: 58.

Asadov, S. M. (Helminths of Rupicapra rupicapra caucasica in Azerbaidjan). Izv. Akad. Nauk. Azerb. S.S.R. biol. agr. 5 1959: 93-96. [Russian summary].

Asahina, E. A culture note of a bdellid rotatorian Philodina rossola Ehrenberg. Jap. J. Limnol. 14 1950: 181-188 3 figs.

Ash, L. R. Life cycle studies on Gnathostoma procyonis Chandler, 1942, a nematode parasite of the raccoon. J. Parasit. 46 5 Sect. 2: 37. [Abstract].

Ash, L. R. see Malek, E. A.

Atlavinite, O. P. Influence of the character of soil on the distribution and quantity of earthworms. Trud. Akad. Nauk. Lith. S.S.R., ser. B, 2 (22): 55-64. [In Russian].

Au, N. see Chu, G. W. T. C.

Augustine, D. L. see Chernin, E.

Austin, A. P. see Dasgupta, S.

Ax, P. Turbellarien aus salzdurchtränkten Wiesenböden der deutschen Meeresküsten. Z. wiss. Zool. 163: 210-236 27 figs.

Azevedo, J. F. de & Gomes, F. G. A aplicação de algunas provas serológicas e cutâneas no diagnóstico de certas helmintiases. An. Inst. Med. trop. Lisboa 16 1–4 1959: 5–13. [English & French summaries].

Babenskas, M. The parasitological expedition in the district of Ignalina. Acta parasit. lithuan. 2 1959 [1960]: 9-11.

Babero, B. B. (1). On the migration of Ascaris lawis Leidy, 1856 in some experimentally infected hosts. Trans. Amer. micr. Soc. 79: 439-442.

Babero, B. B. (2). Further studies on helminths of the opossum, *Didelphis virginiana*, with a description of a new species from this host. J. Parasit. 464: 455-463 l pl.

Babero, B. B. (3). A survey of parasitism in skunks (Mephilis mephilis) in Louisiana, with observations on pathological damages due to helminthiasis. J. Parasit. 46 5 Sect. 2: 26–27 [Abstract].

Babero, B. B. & Thomas, L. J. A record of *Pharurus oserkaias* (Skrjabin, 1942) in an Alaskan whale. J. Parasit. 46: 726.

Bacci, G. & Bortesi, O. Conferma della variabilità dei genotipi sessuali nel Polichete ermafrodita Ophryotrocha puerilis siberti. R.C. Accad. Lincei (8) 28: 92-94.

Baer, J. G. Contribution à l'étude des helmintes parasites du Merle Turdus merula L. I. Une nouvelle espèce de trématode Euamphimerus pancreaticus n. sp. (Opisthorchiidae). Bull. Soc. neuchatel. Sci. nat. (3) 83: 63-70 l pl. [English summary].

Baer, J. G. & Bona, F. Révision des cestodes Dilepididae Fuhrm., 1907 des Ardéiformes. Note préliminaire. Boll. Ist. Zool. Univ. Torino 6 1958–60 : 91–143 16 figs.

Baer, J. G. & Santa, E. della. Matériaux pour servir à une révision des espèces du genre Hymenolepis Weinland (Cestoda), parasites de Musaraignes. I. Hymenolepis prolifer (Villot, 1880) Stammer, 1955. Bull. Soc. neuchatel. Sci. nat. (3) 63: 71-77 1 pl. 3 figs. [English summary].

Bailey, W. S. The incidence of Spirocerca lupi and Dirofilaria immitis in dogs in the Philippine Islands. J. Parasit. 46 5 Sect. 2: 28. [Abstract].

Bainbridge, V. The plankton of inshore waters off Freetown, Sierra Leone. Fish. Publ. Lond. No. 13: 1-48 22 figs.

Baisden, L. A. see Tromba, F. G.

Ball, G. H. see Taylor, A. E. R.

Banse, K. On marine Polychaeta from Mandapam (South India). J. mar. biol. Ass. India 1: 165-177 4 figs.

Barnard, J. L. see Hartman, O.

Barnard, J. L. see Reish. D. J.

Barnes, V. E. see Cloud, jr. P. E.

Barretto, A. C. Schistosomasis mansoni in the City of Salvador, Bahia. Studies on the vector, host parasite relationships and epidemiological aspects. Bol. Fund. G. Moniz No. 16: 1-80 13 figs. [English summary].

Barsotti, G. see Panseri, C.

Barth, R. Mikroanatomische und Histologische Untersuchungen ueber die Muskulatur der Chaetognathen. An. Acad. bras. Cienc. 32: 147–161 25 figs.

Baruffa, G. Osservazioni sulla epidemiologia della schistosomiasi vescicale bel distretto di Gelib (Basso Giuba-Somalia). Riv. Parassit. 21: 1-12 2 figs.

Barus, V. see Tenora, F.

Barya, M. A. see Sarwar, M. M.

Bassindale, R. & Clark, R. B. The Gann Flat, Dale: studies on the ecology of a muddy beach. Fld. Stud. 1: 1-22 12 figs.

Bassus, W. Die Nematodenfauna des Fichtenrohhumus unter dem Einfluss der Kalkdüngung. Nematologica 5: 86-91.

Bastide, P. see Megemont, C.

Bauer, O. N. Ökologie der Parasiten des Süsswasserfische (Milieu-Parasiten Beziehungen). Bull. Inst. freshw. Fish., Leningr. 49 1959: 1–206 26 figs.

Baugh, S. C. (1). Studies on Indian Rhynchobdellid leeches. Parasitology 50: 287-301 6 figs.

Baugh, S. C. (2). Studies on Indian rhynchobdellid leeches. II. Zool. Anz. 165: 468-477 6 figs.

Bazoche, D. Découvertes de conodontes dans l'Ordovicien inférieur du sondage El Gassi No. 1 (Gi 1). Rev. micropaléont. 3: 183-187 l pl.

Beach, N. W. A study of the planktonic rotifers of the Ocqueoc River system, Presque Isle County, Michigan. Ecol. Monogr. 30: 339-357 9 figs.

Bearup, A. J. Parasitic infection in cats in Sydney, with special reference to the occurrence of Ollulanus tricuspis. Aust. nat. J. 36: 352-354.

Becker, E. Zur geographischen Verbreitung und Ökologie der tricladen Turbellarien in Württemburg. Jh. Ver. vaterl. Naturk. Württemb. 115: 267-305 13 figs.

Becklund, W. W. Morphological anomalies in male Haemonchus contortus (Rudolphi, 1803) Cobb, 1898 (Nematoda: Trichostrongylidae). Proc. helminth. Soc. Wash. 27: 194-199 12 figs.

Bednarz, S. (1). Occurrence of Galba truncatula Müll. and the cercaria Fasciola hepatica L. in the basin of the River Barycz. Przegl. 2001. 4: 199–204 2 figs.

Bednarz, S. (2). On the biology and ecology of Galba truncatula Müll. and cercariae of Fasciola hepatica L. in basin of the river Barycz. Acta Parasit. polon. 8: 279–288.

Behura, B. K. see Ghosh, G. S.

Bélanger, L. F. Parasitic uptake of radiosulphate by trematodes. Canad. J. Zool. 38: 226-227 l pl.

Bellan, G. Annelides Polychètes récoltées au cours de sa Ile campagne Méditerranéenne par le "Président-Théodore-Tissier". Rev. Trav. Inst. pêches marit. 24: 273-292 4 figs.

Belokobilenko, V. T. Helminths of chickens in Alma-Ata Province. Trud. Inst. Zool. Alma-Ata 12: 173-182. [In Russian].

Bénard, F. La faunule associée au Lithophyllum incrustans Phil. des cuvettes de la région de Roscoff. Cah. Biol. mar. 1: 89-102 2 figs.

Bennington, E. & Pratt, I. The life history of the salmon-poisoning fluke, Nanophyetus salmincola (Chapin). J. Parasit. 46: 91-100 1 pl.

Berger, W. Eine spiralförmige Lebensspur aus dem Rupel der bayrischen Beckenmolasse. Neues Jb. Geol. Paläont. B. 1957 12: 538-540 fig.

Bergquist, H. R. Occurrence of foraminifera and conodonts in Upper Paleozoic and Triassic rocks, Northern Alaska. J. Paleont. 34: 596-601 figs.

Berkeley, E. & Berkeley, C. (1). Notes on some Polychaeta from the west coast of Mexico, Panama and California. Canad. J. Zool. 38: 357-362.

Berkeley, E. & Berkeley, C. (2). Some further records of pelagic Polychaeta from the northeast Pacific north of latitude 40°N. and east of longitude 175°W., together with records of Siphonophora, Mollusca, and Tunicata from the same region. Canad. J. Zool. 38:787-799.

Bernard, C. see Doby, J. M.

Bernard, J. Sur trois cas de cysticercose grave chez des campagnols (Rodentia-Microtidae). Ann. Parasit. hum. comp. 35: 243-250 1 fig.

Berntzen, A. K. An effective method for the in vitro culture of Hymenolepis diminuta. J. Parasit. 46 5 Sect. 2: 47. [Abstract].

Berrie, A. D. (1). The influence of various definitive hosts on the development of *Diplostomum phoxini* (Strigeida, Trematoda). J. Helminth. 34: 205-210.

Berrie, A. D. (2). Two Diplostomulum larvae (Strigeida, Trematoda) in the eyes of sticklebacks (Gasterosteus aculeatus L.). J. Helminth. 34: 211-216 l pl.

Bessis, M. see Roche, J.

Best, J. B. Diurnal cycles and cannibalism in planaria. Science 131: 1884–1885 1 fig.

Betchaku, T. A copper sulfate-silver nitrate method for nerve fibres of planarians. Stain Tech. 35: 215-218 4 figs.

Beverley-Burton, M. (1). A new cestode, Hymenolepis mandabbi sp. nov., from the tufted duck, Aythya fuligula (L.). Ann. Mag. nat. Hist. (13) 2 1959 [1960]: 560-564 6 figs.

Beverley-Burton, M. (2). A new dilepidid cestode, Mashonalepis dafyddi n. g., n. sp., from the gray Heron, Ardea cinerea L. J. Parasit. 46: 487-490 7 figs.

Beverley-Burton, M. (3). Some trematodes from otters in Southern Rhodesia including a new strigeid, Prudhoella rhodesiensis, n. gen., n. sp. Proc. helminth. Soc. Wash. 27: 129-134 5 figs.

Beverley-Burton, M. (4). A new Echinostome, Parallelotstis kafuensis, n. sp. from the great white heron, Egretta alba melanorhyncha (Wagl.), in Northern Rhodesia. Proc. helminth. Soc. Wash. 27: 268-270.

Beye, H. K. see Tobie, B. E.

Bezubik, B. (1). Effect of cortisone on the susceptibility of hamsters and guinea pigs to the sheep and rabbit strains of Strongyloides papillosus. J. Parasit. 46 5 Sect. 2: 30-31 [Abstract].

Bezubik, B. (2). Helminth parasites of black grouse (Lyrurus tetrix L.) and capercaillie (Tetrao urogallus L.). Acta Parasit. polon. 8: 37-46.

Bezubik, B. & Furmaga, S. The parasites in Macacus cynomolgus L. from Indonesia. Acta Parasit. polon. 8: 335-344.

Bhatia, B. B. A preliminary survey of the nematode parasites of sheep and some of the types of helminthic lesions encountered. Proc. Indian Sci. Congr. 47: 441-442.

Bhatia, B. B. see Pande, B. P.

Biagi F., F. & Mekbel A., S. Hidatidosis humana autóctona en la Republica Mexicana. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930– 1960. Mexico, D.F. (Instituto Politecnico Nacional): 353-356 4 figs.

Bican, J. see Pravda, O.

Biczók, F. see Ábrahám, A.

Biester, H. E. see Zimmermann, W. J.

Biguet, J. see Deblock, S.

Bird, A. F. (1). The effect of some single element deficiencies on the growth of Meloidogyne javanica. Nematologica 5: 78-85 2 figs.

**Bird**, A. F. (2). Additional notes on the attractiveness of roots to plant parasitic nematodes. Nematologica 5: 217.

Birkenholz, D. E. see Hunter, G. W.

Birkenholz, D. E. see Layne, J. N.

Birkenmajer, K. Fucusopsis angulatus Palibin (Problematica) from the Variegated Beds (Danian-Paleocene) of the Pieniny Klippen-Belt Mantle (Central Carpathians). Ann. Soc. géol. Pologne 29 1959: 227-232 1 pl. figs. [English summary].

Birová-Volosinovičová, V. (1). Helmintofauna des Haushuhnes (*Gallus gallus domesticus*) in der Slowakei. Biológia, Bratislava 15: 241-249 8 figs. [German summary].

Birova-Volosinovičová, V. (2). Helminthofauna des Haustruthahns (Melagris gallopavo domesticus L.) in der Slowakei-Č.S.R. Biológia, Bratislava 15: 427–437 5 figs. [German summary].

Bischoff, G. Die Conodonten-Stratigraphie des rheno-herzynischen Unterkarbons mit Berücksichtigung der Wocklumeria-Stufe und der Devon/Karbon-Grenze. Abh. hess. Landesanst. Bodenforsch. 19 1957: 1-64 6 pls. figs.

Bischoff, G. & Sannemann, D. Unterdevonische Conodonten aus dem Frankenwald. Notizbl. hess. Landesanst. Bodenforsch. 86 1958: 87-110 4 pls.

Bischoff, G. & Stoppel, D. Zum Alter des Wollenberg-Kellerwald-Quarzits (Rheinisches Schiefergebirge). Neues Jb. Geol. Paläont. B 1957 1: 14-24 figs.

Bischoff, G. & Ziegler, W. Die Conodontenchronologie des Mitteldevons und des tiefsten Oberdevons. Abh. hess. Landesanst. Bodenforsch 22 1957: 1-136 21 pls. figs.

Bixiulevičius, S. (1). Zur Frage der Resistenz der Eier von Ascaris lumbricoides und Trichocephalus trichiurus gegenüber den verschiedenen Auszenfaktoren. Acta parasit. lithuan. 2: 39-54.

Biziulevičus, S. (2). Lebensfähigkeit und Entwicklung der Ascaris lumbricoides und Trichocephalus trichiurus Eier im Erdboden. Acta parasit. lithuan. 2 1959 [1960]: 115-140.

Bizzell, W. E. see Ciordia, H.

Boev, S. N. (1). On the systematic position of Gelanocaulus boevi Asadov, 1958. Trud. Inst. Zool. Alma Ata 14: 43-46 fig. [In Russian].

Boev, S. N. (2). On *cysticerci* occurring in muscles of roebucks. Trud. Inst. Zool. Alma-Ata 14: 47-53 7 figs. [In Russian].

Boev, S. N. see Synī Sho-Tai.

Bogojavlenskij, J. K. The hypoderma structure of some Ascaridata. Acta parasit. lithuan. 2 1959 [1960]: 83-95.

Bogoslowsky, A. S. Observations on the reproduction of Conochiloides coenobasis Skorikov and the statement of a physiological category of females new to heterogenous Rotifera. Zool. Zh. 39: 670-677 9 figs. [English summary].

Bona, F. see Baer, J. G.

Bondareva, V. I. (1). On the specific independence of *Moniezia alba*, the cestode of cattle. Trud. Inst. Zool. Alma-Ata 12: 140-144 fig. [In Russian].

Bondareva, V. I. (2). On the reduction of the infection of sheep with Cestodes in Southern Kazakhstan. Trud. Inst. Zool. Alma-Ata 14: 67-68. [In Russian].

**Bondi,** C. Osservazioni sui rapporti tra rigenerazione degli occhi e sistema nervoso in *Dugesia lugubris*. Arch. zool. ital. **44** 1959 [1960]: 141–150 3 figs.

Bonney, D. G. see Clark, R. B.

Bortesi, O. see Bacci, G.

Bosher, J. E. Longevity in vitro of Ditylenchus dipsaci (Kühn) Filipjev from narcissus. Proc. helminth. Soc. Wash. 27: 127-128.

Bouckaert, J. Stratigraphie et paléontologie de la super-zone R, dans les vallées de la Berwinne et de la Geule. Mem. Inst. géol. Univ. Louvaine 21: 3-94 5 pls. figs. [English abstract].

Bousfield, E. L. & Leim, A. H. The fauna of Minas Basin and Minas Channel. Bull. nat. Mus. Can. No. 166: 1-30 3 figs.

Boyd, J. M. Studies of the differences between the fauna of grazed and ungrazed grassland in Tiree, Argyll. Proc. zool. Soc. Lond. 135: 33-54.

Bozhkov, D. see Yanchev, Y.

Brambell, M. R. see Field, A. C.

Brand, J. van den ses D'Herde, J.

Brangham, A. N. (1). Ant Vectors in the life-cycle of the lesser liver-fluke, Dierocoelium dendriticum (Rudolphi 1819). Ent. Gaz. (10) 1959: 111-131.

Brangham, A. N. (2). Notes on ant vectors in the life-cycle of a Trematode. Ent. Mag. (4) 20 243: 54-56.

Bravo-Hollis, M. Tremátodos de peces de aguas mexicanas del Pacifico. XVI. Microcotyle caballero n. sp., monogéneo microcotilido de la subfamilia Microcotylinae Monticelli 1892. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-60. Mexico, D.F. (Instituto Politecnico Nacional): 87-93 9 figs.

Bravo-Hollis, M. see Brenas, R.-R.

Bravo-Hollis, M. see Caballero y C., E.

Brener, Z. & Chaia, G. Isolamento e manutenção do Strong yloides ratti (Sandground, 1925) em condições de laboratório. Rev. bras. Biol. 20: 447-451.

Brenes, R.-R. & Bravo-Hollis, M. Helmintos de la Republica de Costa Rica IX. Nematoda 3. Algunos nemátodos de reptiles, con descripción de dos nuevas especies: Atractis caballeroi n. sp. y Cyrtosomum longicaudatum n. sp. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 451-464 5 pls.

Bridgman, J. F. see Sogandares-Bernal, F.

Brinkhurst, R. O. Introductory studies on the British Tubificidae (Oligochaeta). Arch. Hydrobiol. 56: 395-412 14 figs.

Brody, G. & Wuest, E. C. Activity of dithiazanine iodide administered in feed against larval infections of Assaris suum in young pigs. J. Parasit. 46 5 Sect. 2: 9. [Abstract].

Broek, E. van den. Cathaemasia variabilis n. sp. (Trematoda: Cathaemasiidae) from the oesophagus of Sphenorhynchus abdimii. J. Helminth. 34: 243–246 2 fies.

Brom, F. see Pravda, O.

Brown, H. W. see Dunn, M. C.

Brown, M. L. see Rothstein, N.

Bruce, J. I., Llewellyn, L. M. & Sadun, E. H. Susceptibility of wild mammals to experimental infection with *Schistosoma mansoni*. J. Parasit. 46 5 Sect. 2:33. [Abstract].

Bruskin, B. R. A histological investigation of glycogen in the cat liver fluke (Opisthorchis felineus). Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 127 1959: 697-699 figs.

Bruskin, B. R. see Logachev, E. D.

Brygoo, E. R. Evolution de Folepella furcata (von Linstow, 1899) chez Culex fatigans Wiedemann, 1828. Arch. Inst. Pasteur Madagascar 28: 129-138.

Brygoo, E. R., Capron, A. & Randriamalala, J. C. Sur quelques méthodes de coloration sélective des coques d'oeufs d'helminthes parasites de l'homme. Bull. Soc. Path. exot. 52: 655-664.

Brygoo, E. R. see Capron, A.

Brygoo, E. R. see Chabaud, A. E.

Brygoo, E. R. see Dodin, A.

Brzeski, M. (1). Cephalobus (Heterocephalobus) kaczanowskii subgen. nov., sp. nov. (Nematoda: Cephalobidae). Bull. Acad. polon. Sci. Cl. Sci. biol. 8: 163-165 3 fizz.

Brzeski, M. (2). Drei neue freilebende Nematoden aus Polen. Bull. Acad. polon. Sci. Sér. Sci. biol. 8: 261-264 7 figs.

Buck, A. A. see Sadun, E. H.

Buckley, J. J. C. On Brugia gen. nov. for Wuchereria spp. of the "Malayi" group i.e., W. malayi (Brug, 1927), W. pahangi Buckley and Edeson, 1956, and W. patei Buckley, Nelson and Heisch, 1958. Ann. trop. Med. Parasit. 54: 75-77 1 fig.

**Bueding,** E. Parasite physiology. [Summary of a discussion]. Proc. helminth. Soc. Wash. 27: 232-233.

Buenaventura, A. see Monserrat, C.

Bull, P. C. Parasites of the European rabbit, Oryctolagus cuniculus (L.) on some Subantarctic Islands. N.Z. J. Sci. 3: 258-273 1 pl.

Bullivant, J. S. Photographs of the bottom fauna in the Ross Sea. N.Z. J. Sci. 2 1959: 485-497 10 figs.

Bullock, W. L. (1). Histochemical studies on the Acanthocephala. IV. Acid phosphatase distribution in some Neoechinorhynchidae. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 423–428 7 gs.

Bullock, W. L. (2). Some acanthocephalan parasites of Florida fishes. Bull. mar. Sci. Gulf & Caribbean 10: 481-484.

Burnett, G. F. Filariasis research in Fiji 1957-1959, Part 1. Epidemiology. J. trop. Med. Hyg. 63: 153-162.

Burrows, R. B. & Lillis, W. G. Eusytrema procyonis Denton, 1942 (Trematoda: Dicrocoeliidae), from the domestic cat. J. Parasit. 46: 810-812 1 pl.

Buša, V. Fund der Trematode Hyptiasmus arcuatus (Stossich, 1902) Kossack, 1911 bei der Hausente in der Slowakei. Biológia, Bratislava 15: 546-549 2 figs. [German summary].

Buša, V. see Macko, J. F.

Butorina, L. G., Kutikova, L. A. & Luferova, L. A. On rotifers of the genus *Notholea* of the Rybinsk water reservoir. Byull. Inst. Biol. Vodochr. No. 8-9: 17-18 2 figs. [In Russian].

Buttner, A. & Vacher, C. (1). Evolution d'un Plagiorchis s'enkystant chez Gammarus pulex L., et identifié à Plagiorchis cirratus (Rud. 1802) (Trematoda-Plagiorchiidae). C.R. Soc. Biol. Paris 153: 1712-1718 4 figs.

Buttner, A. & Vacher, C. (2). Recherches sur le développement et l'identification de Plagiorchis (Multiglandularis) cirratus (Rudolphi 1802). 1. Etude du cycle évolutif. Ann. Parasit. hum. comp. 35: 268-281 4 figs.

Caballero y C., E. Trematodes de las tortugas de Mexico. VII. Descripcion de un Trematodo Digeneo que parasita a tortugas marinas comestibles del Puerto de Acapulco, Guerrero. An. Inst. biol. Mex. 30: 159– 166 2 figs. [English summary].

Caballero y C., E. & Bravo-Hollis, M. Trematodos de peces de aguas mexicanas del Pacífico. XVIII. Dos nuevos generos de Monogenoidea Bychowsky, 1937. An. Inst. biol. Mex. 60: 167–181 14 figs. [English summary].

Caballero y C., E. & Grocott, R. G. Helmintos de la Republica de Panamá. XXIII. Estudios de dos trematodos de murciélagos, con descripción de una neuva especie. Ciencia, Mex. 19 1959: 244–248 2 figs.

Cailleux, A. see Chavan, A.

Cain, A. J. Oligochaeta new to Britain. Ann. Mag. nat. Hist. (13) 2 1959 [1960]: 193-198 3 figs.

Callot, J. & Gayot, G. Cysticercus longicollis chez des canidés. Ann. Parasit. hum. comp. 35: 15-22 5 figs.

Cameron, T. W. M. & Myers, B. J. Manistrongylus meyeri (Travassos, 1937) gen. nov., and Necator americanus from the pangolin. Canad. J. Zool. 38: 781-786 7 figs.

Camongis, G. see Davenport, D.

Campana-Rouget, Y. & Paulian, P. Mise en synonymie de deux espèces de Contracaccum, parasites de mammifères marins. Ann. Parasit. hum. comp. 35: 191–192 2 figs.

Campana-Rouget, Y. see Chabaud, A. G.

Campbell, J. A. see Field, A. C.

Campbell, W. C. (1). Nature and possible significance of the pigment in fascioloidiasis. J. Parasit. 46: 769-775 3 figs.

Campbell, W. C. (2). Presence of phenolase in the fasciolid metacercarial cyst. J. Parasit. 46: 848 fig.

Campbell, W. C. & Richardson, T. Stimulation of cysticercus evagination by means of surfactants. J. Parasit. 46: 490.

C

E

Canaris, A. G. A cestode life cycle involving land snails and shrews. J. Parasit. 46: 524.

Capron, A. & Brygoo, E. R. (1). Contribution à la connaissance de la bilharziose intestinale à *Schistosoma mansoni* à Madagascar. I.—Enquête malacologique et parasitologique. Bull. Soc. Path. exot. **52** 1959: 503–515 map.

Capron, A. & Brygoo, E. R. (2). Sur la constitution des oeufs d'helminthes. I.—Présence et formation d'une substance acido-alcoolo-résistante de la coque. Bull. Soc. Path. exot. 52: 574-577.

Capron, A. see Deblock, S.

Capron, A. see Dodin, A.

Cardell, R. R., Jr. & Philpott, D. E. The ultrastructure of the tail of the cercaria of *Himasthla quissetensis* (Miller and Northup, 1926). Trans. Amer. micr. Soc. 79: 442–450 7 figs.

Cargo, D. G. Predation of eggs of the spotted salamander, Ambystoma maculatum, by the leech, Macrobdella decora. Chesapeake Sci. 1: 119-120 1 fig.

Carithers, R. W. see Rothstein, N.

Carvalho, R. G. de. Contribuição para o estudo da bilharziose no posto-sede da Delegarcia de Saúde dos Ganguelas. An. Inst. Med. trop. Lisboa 16 1959: 433-436. [English and French summaries].

Castiaux, P. see Semal-Van Gansen, P.

Caveness, F. E. & Panzer, J. D. Nemic galvanotaxis. Proc. helminth. Soc. Wash. 27: 73-74.

Cervenková, E. see Stepánek, M.

Chabaud, A. G. Remarques sur la systématique des nématodes *Trichostrongyloidea*. Bull. Soc. zool. Fr. 84 1959 [1960]: 473–483 5 figs.

Chabaud, A. G., Campana-Rouget, Y. & Brygoo, E. R. Les nematodes Seuratoidea. Ann. Parasit. hum. comp. 35: 316-345 17 figs.

Chabaud, A. G. & Petter, A. J. Sur les nématodes atractides. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 465—470.

Chabaud, A. G. see Inglis, W. G.

Chandebois, R. Sur l'"induction" du pharynx dans la régénération des Planaires. Bull. Soc. zool. Fr. 34 1959 [1960]: 434-439 6 figs.

Chavan, A. & Cailleux, A. Détermination practique des fossiles Paris, 1957: 1-385 figs.

Chekanovskaya, O. V. On Oligochaeta from the Bodies of Water in Central Asia (Ferghana Valley and the River Murgab). Zool. Zh. 38 1959: 1151-1162 5 figs. [Russian, English summary].

Chen, H. T. Taxonomic consideration of Paragonimus, including morphological notes on P. skrjabini Chen. Acta zool. sinica 12: 28-36 2 figs. [English summary].

Cheng, T. C. (1). Studies on the trematode family Brachycoeliidae. IV. A revision of the genus Mesocoelium Odher, 1911; and the status of Pintnaria Poche, 1907. Amer. midl. Nat. 63: 439-469 28 figs.

Cheng, T. C. (2). The life history of *Brachyceelium* obesum Nicoll, 1914, with a discussion of the systematic status of the trematode family Brachycoeliidae Johnston 1912. J. Parasit. 46: 464-474 2 pls.

Cheng, T. C. (3). A survey of Enterobius vermicularis infestation among pre-school age transient children; with the description of a modified Graham swab. J. Tenn. Acad. Sci. 35: 49-53 2 figs.

Cheng, T. C. & James, H. A. (1). The histopathology of *Crepidostomum* sp. infection in the second intermediate host, *Sphaerium striatinum*. Proc. helminth. Soc. Wash. 27: 67-68.

Cheng, T. C. & James, H. A. (2). Studies on the germ cell cycle, morphogenesis and development of the cercarial stage of *Crepidostomum cornutum* (Osborn, 1903). (Trematoda: Allocreadiidae). Trans. Amer. micr. Soc. 79: 75-85 3 pls.

Cheng, T. C. & Provenza, D. V. (1). Studies on the trematode family Brachycoeliidae. III. The subfamilies subordinate to the Brachycoeliidae and the status of the genus Cymalocarpus Looss, 1899. Amer. midl. Nat. 63: 162–168 2 figs.

Cheng, T. C. & Provenza, D. V. (2). Studies on cellular elements of the mesenchyma and of tissues of Haematoloechus confusus Ingles, 1932 (Trematoda). Trans. Amer. micr. Soc. 79: 170-179 6 pls.

Chernin, E., Michelson, E. H. & Augustine, D. L. Daubaylia potomaca, a nematode parasite of Helisoma trivolvis, transmissable to Australorbis glabratus. J. Parasit. 46: 599-607 2 pls.

Chien, K'o & Liu, S. T. A note on hermaphroditism of female Schistosoma japonicum. Acta zool. sinica 12: 9-11 1 fig. [English summary].

Ching, H. L. (1). Some digenetic trematodes of fishes of Friday Harbor, Washington. J. Parasit. 46: 241-50 1 pl.

Ching, H. L. (2). Studies on three hemiuroid cercariae from Friday Harbor, Washington. J. Parasit. 46: 663-670 1 pl.

Ching, H. L. (3). Some digenetic trematodes of shore birds at Friday Harbor, Washington. Proc. helminth. Soc. Wash. 27: 53-62 6 figs.

Ching, H. L. see Alicata, J. E.

Chitwood, B. G. (1). Choanolaimus psammophilus J. G. De Man. 1880, rediscovered, and Synonchium obtusum N. A. Cobb, 1920, as a natural enemy of plant pathogens. Nematologica Suppl. II: 56-60.

Chitwood, B. G. (2). A preliminary contribution on the marine nemas (Adenophorea) of Northern California. Trans. Amer. micr. Soc. 79: 347-384 4 pls.

Chitwood, M. B. A new spiruroid nematode, Rabbium caballeroi, from the stomach of Leiocephalus carinatus, from the Bahama Islands. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo, 1930– 1960. Mexico, D.F. (Instituto Politecnico Nacional): 471-473 9 figs.

Chitwood, M. see Gardiner, J. L.

Chodorowski, A. (1). Ecological differentiation of turbellarians in Harsz Lake. Polsk. Arch. Hydrobiol. 6 (19) 1959: 33-73 6 figs.

Chodorowski, A. (2). Vertical stratification of Turbellaria-species in some littoral habitats of Harsz Lake. Polsk. Arch. Hydrobiol. 8: 153–163 5 figs.

Choe, S. On the life history of the polychaete worm, Diopatra neapolitana Delle Chiaje. Bull. jap. Soc. Sci. Fish. 26: 430-437 8 figs. [English summary].

Chow, S. C. see Ling, M. T.

Christensen, B. A comparative cytological investigation of the reproductive cycle of an amphimictic diploid and a parthenogenetic triploid form of Lumbricillus lineatus (O.F.M.) (Oligochaeta—Enchytraeidae). Chromosoma 11: 365–379 17 figs.

Christensen, B. & Nielsen, C. O. Studies on Enchytracidae. IV. Preliminary report on chromosome numbers of 7 Danish genera. Chromosoma 7 1955: 460-468 4 figs.

Chu, G. W. T. C., Au, N. & Watson, D. E. Culturing Hawaiian avian marine schistosome Austrobilharzia variglandis Penner in laboratory media. J. Parasit. 46 5 Sect. 2 : 33. [Abstract].

Chute, R. M. (1). Overwintering of helminths in hibernating animals. J. Parasit. 46: 539.

Chute, R. M. (2). The development of Trichinella spiralis in the dormouse, Eliomys quercinus. J. Parasit. 46 5 Sect. 2: 21. [Abstract].

Chute, R. M. & Covalt, D. B. The effect of body temperature on the development of *Trichinella spiralis* in bats. J. Parasit. 46: 855-858.

Cichorius, H.-D. Über das Auftreten freilebender Wurzelnematoden in rheinischen Böden unter besonderer Berücksichtigung der Standortverhältnisse. Nematologica 5: 231–252 7 figs.

Ciordia, H. & Bizzell, W. E. The effect of temperature on embryonic and larval development of various species of cattle nematodes. J. Parasit. 46 5 Sect. 2: 40. [Abstract].

Clark, D. L. Conodonts from the Triassic of Nevada and Utah. J. Paleont. 33 1959: 305-312 2 pls. fig.

Clark, M. E. & Clark, R. B. The fine structure and histochemistry of the ligaments of Nephtys. Quart. J. micr. Sci. 101: 133-148 4 figs.

Clark, R. B. Habituation of the polychaete Nereis to sudden stimuli. I. General properties of the habituation process. Anim. Behav. 8: 82-103 10 figs.

Clark, R. B. & Bonney, D. G. Influence of the supra-oesophageal ganglion on posterior regeneration in Nereis diversicolor. J. Embryol. exp. Morph. 8: 112-118 2 figs.

Clark, R. B. & Clark, M. E. The ligamentary system and the segmental musculature of Nephtys. Quart. J. micr. Sci. 101: 149-176 20 figs.

Clark, R. B. & Haderlie, E. C. The distribution of Nephys cirrosa and N. hombergi on the south-western coasts of England and Wales. J. Anim. Ecol. 29: 117-147 figs.

Clark, R. B. see Bassindale, R.

Clark, W. C. (1). The oesophago-intestinal junction in the Mononchidae (Enoplida, Nematoda). Nematologica 5: 178–183 5 figs.

Clark, W. C. (2). Redescription of Mononchus truncatus Bastian, M. papillatus Bastian and Prionchulus muscorum (Dujardin) (Enoplida, Nematoda). Nematologica 5: 184–198 3 figs.

Clark, W. C. (3). New Zealand Mononchidae (Enoplida, Nematoda). I. The genera *Mononchus* Bastian and *Prionchulus* Cobb. Nematologica 5: 199– 214 4 figs.

Clark, W. C. (4). The Mononchidae (Enoplida, Nematoda) of New Zealand. II. The genus *Iotonchus* (Cobb, 1916) Altherr, 1950. Nematologica 5: 260-2745 figs. Clark, W. C. (5). The Mononchidae (Enoplida, Nematoda) of New Zealand. III. A review of the genus Cobbonchus Andrássy, 1958 with descriptions of new species. Nematologica 5: 275-284 6 figs.

Clarke, C. E. see Rexroad, C. B.

Clarkson, M. J. & Owen, L. N. The species of *Trichuris* in the domestic cat. J. Helminth. 34: 319-322 1 fig.

Clerx, J. see Meyus, H.

Clifford, C. M. see Haley, A. J.

Cloud, jr., P. E., Barnes, V. E. & Hass, W. H. Devonian-Mississippian transition in Central Texas. Bull. Geol. Soc. Amer. 68 1957: 807-816 5 pls. [reprinted in Rep. Invest. Univ. Tex. bur. econ. Geol. 31 1957: 807-816].

Cognette, G. Differentiation spécifiques et intraspecifique, par rapport a l'habitat de Syllidiens de la Manche et de la Méditérranée. Cah. Biol. mat. 1: 113-120 1 fig.

Coil, W. H. Studies on two gorgoderid cercariae from Oklahoma with the description of a new species. Proc. helminth. Soc. Wash. 27: 39-41 5 figs.

Coil, W. H. & Kuntz, R. E. (1). Trematodes from Turkey with the descriptions of Creptotrema milleri, n. sp. and Phagicola micracantha, n. sp. Proc. helminth. Soc. Wash. 27: 28-32 3 figs.

Coll, W. H. & Kuntz, R. E. (2). Three new genera of trematodes from Pacific sea serpents, *Laticauda colubrina* and *L. semifasciata*. Proc. helminth. Soc. Wash. 27: 145-150 6 figs.

Coil, W. H. & Kuntz, R. E. (3). Trematode parasites of vertebrates of East Pakistan. Trans. Amer. micr. Soc. 79: 281-286 5 figs.

Cole, L. C. A note on population parameters in cases of complex reproduction. Ecology 41: 372-375.

Coles, J. W. Free-living nematodes from Skipper's Island. Essex Nat. 30 1959: 204-207.

Colglazier, M. L. see Enzie, F. D.

Collinson, C., Rexroad, C. B. & Scott, A. J. Abundance and stratigraphic distribution of Devonian and Mississipian conodonts in the Upper Mississippi valley. J. Paleont. 33 1959: 692–696 figs.

Collinson, C. see Scott, A. J.

Colwin, A. L. & L. H. Egg membrane lytic activity of sperm extract and its significance in relation to sperm entry in Hydroides hexagoms (Annelida). J. biophys. & biochem. Cytol. 7: 321–328 5 pls.

Copeland, M. J. A Kinderhook formation from Crowsnest Pass, Alberta. Trans. roy. Soc. Can. (3) 54: 37-43 l pl. 1 fig.

Correa, D. D. Two new marine Turbellaria from Florida. Bull. mar. Sci. Gulf & Caribbean 10: 208-216 6 figs.

Cort, W. W., Hussey, K. L. & Ameel, D. J. (1). Studies on a microsporidian hyperparasite of strigeoid trematodes. I. Prevalence and effect on the parasitized larval trematodes. J. Parasit. 46: 317-325 2 pls.

Cort, W. W., Hussey, K. L. & Ameel, D. J. (2). Studies on a microsporidian hyperparasite of strigeoid trematodes. II. Experimental transmission. J. Parasit. 46: 327-336 1 pl.

th

B

Cort, W. W., Hussey, K. L. & Ameel, D. J. (3). Seasonal fluctuations in larval trematode infections in Stagnicola emarginata angulata from Phragmites Flats in Douglas Lake. Proc. helminth. Soc. Wash. 27: 11-13.

Costa, S. Recherches sur les fonds a *Halarachnion* spatulatum de la baie de Marseille. Vie et Milieu 11: 1-68 21 figs.

Costello, L. C. The effects of serotonin in experimentally-induced ascariasis. J. Parasit. 46 5 Sect. 2: 8-9. [Abstract].

Cotten, J. Observations on the cytology of the potato-root eelworm, *Heterodera rostochiensis* Wollenweber. Nematologica Suppl. II: 123-126 4 pls.

Coumbaras, A. La bilharziose dans le sud tunisien. Etude particulière du Nefzaoua (Région de Kebili-Douz). Arch. Inst. Pasteur Tunis 37: 313-333 9 pls. map.

Couroy, D. A. Preliminary studies into the effects of temperature on the contraction rate of the dorsal blood vessel in the earthworm. Bol. Soc. esp. Hist. nat. Secc. Biol. 58: 75–78 2 figs.

Covalt, D. B. see Chute, R. M.

Grandall, R. B. The life history and affinities of the turtle lung fluke, *Heronimus chelydrae* Maccallum, 1902. J. Parasit. 46: 289-307 3 pls.

Cross, J. H., Jr. The natural resistance of the white rat to Nematospiroides dubius and the effect of cortisone on this resistance. J. Parasit. 46: 175-185 6 figs.

Cross, J. H., Jr. & Scott, J. A. Nematospiroides dubius in the Mongolian gerbil. J. Parasit. 46 5 Sect. 2: 38. [Abstract].

Crusz, H. & Sathananthan, A. H. Metacercaria of Transversotrema patialense in the fresh-water fish Macropodus cupanus. J. Parasit. 46: 613.

Čtyroký, P. Die meeresmolluskenfauna des Unteren Burdigals im Waagtal. Geol. Prace. Slovensk. Akad. 51 1959: 53–140 19 pls. [German summary].

Cunningham, P. C. An investigation of winter dormancy in *Heterodera rostochiensis*. Sci. Proc. roy. Dublin Soc. 10: 1-4 1 fig.

Czapik, A. Microbenthos of fish-ponds in Mydlniki. Acta Hydrobiol. Kraków 1 1959: 187–196 4 figs.

Czaplinski, B. Sur l'anatomie et la cycle évolutif du cestode *Hymenolepis vistulae* sp. n. (Hymenolepididae Fuhrmann, 1907) parasite de l'harle bièvre—*Mergus merganser* L. Acta Parasit. polon. **8**: 299–314 9 figs.

Czibulinski de Szidat, K. see Szidat, L.

Dahm, A. G. Dendrocoelopsis spinosipenis (Kenk) from Yugoslavia and Sweden, and Digonoporus macroposthia an der Lan (Turbellaria Tricladia Paludicola). Lunds Univ. Arsskr. N.F. Avd. 2 56, 8: 1-39 17 figs.

Daily, B. see Glaessner, M. F.

Dalens, H. see Dollfus, R. P.

Dales, R. P. Pelagic polychaetes from the Malacca Straits and South China Sea. Ann. Mag. nat. Hist. (13) 2 1959 [1960]: 481-487 2 figs.

Dasgupta, S. & Austin, A. P. The chromosome numbers and nuclear cytology of some common British serpulids. Quart. J. micr. Sci. 101: 395–400 4 figs.

Dastague, G. see Megemont, C.

Davenport, D., Camougis, G. & Hickok, J. F. Analyses of the behaviour of commensals in host-factor. 1. A Hesioned polychaete and a Pinnotherid crab. Anim. Behav. 8: 209-218 8 figs. David, J. H. S. see Pires, F. M.

Davies, H. A revised list of the lumbricids found in the Bristol district. Proc. Bristol. Nats. Soc. 30: 51-54.

Davis, A. G. & Elliott, G. F. The Palaeogeography of the London Clay Sea. Proc. Geol. Ass. Lond. 68 1958: 255-277.

Davis, R. A. & Jenkins, W. R. Histopathology of Gardenia (Gardenia jasminoides veitchi), infected with three species of Meloidogyne. Nematologica 5: 228-230 pls. ix-x.

Dawes, B. A study of the miracidium of Fasciola hebatica and an account of the mode of penetration of the sportocyst into Limnaes truncatula. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 95–111 3 pls.

Day, J. H. The polychaet fauna of South Africa. Part 5. Errant species dredged off Cape coasts. Ann. S. Afr. Mus. 45: 261-373 14 figs.

Deblock, S. De quelques indentités vraisemblables concernant des métacercaires de Microphallidés d' Europe occidentale. Ann. Parasit. hum. comp. 35: 672-674.

**Deblock,** S. Complément de description d'Hymenolepis stellorae Deblock, Biguet et Capron, 1960. Ann. Parasit. hum. comp. **35**: 757-759 3 figs.

Deblock, S., Biguet, J. & Capron, A. Contribution a l'étude des cestodes de Lari des côtes de France. I. Le genre Hymenolepis. Révision des espèces du genre, à propos de trois descriptions dont une nouvelle. Ann. Parasit. hum. comp 35: 538-574 13 figs.

Deblock, S. & Capron, A. (1). Contribution à l'étude des Microphallidae Travossos, 1920 (Trematoda). IV. Le genre Maritrema: Description complémentaire de M. humile Nicoll, 1907, de M. linguilla et de M. subdolum Jaegerskioeld, 1909. Ann. Parasit. hum. comp. 35: 23-44 7 figs.

**Deblock**, S. & **Capron**, A. (2). Eurycephalus wurtzi nov. sp. (Trématoda Echinostomatidae, Eurycephalinae), parasite d'Ixobrychus minutus I.. Bull. Soc. 2001. Fr. 85: 140-146 1 fig.

Deblock, S., Capron, A. & Biguet, J. Notes de faunistique trématodologique française. I.—Les microphallidés des côtes de la Manche (Pas de Calais). Bull. Soc. 2001. Fr. 85: 205-210 3 figs.

Deblock, S., Capron, A. & Rosé, F. Rédescription d'Hymenolepis (nec Aploparaksis) cirrosa (Krabbe, 1869) (Cestoda, Hymenolepididae). Bull. Soc. zool. Fr. 85: 58-67 6 figs.

Deckart, M. Brutpflege beim kleinen Schneckenegel. Mikrokosmos 49: 359 1 fig.

**Decker,** H. (1). Die endoparasitischen Wurzelnematoden der Gattung *Pratylenchus* als einheimische Pflanzenschädlinge. Wiss. Z. Univ. Rostock. Math. Nat. R. 9: 27-34 9 figs.

Decker, H. (2). Pratylenchus penetrans als Ursache von "Müdigkeitserscheinungen" in Baumschulen der DDR. Nematologica Suppl. II: 68–75 2 pls. 1 fig.

Deelman, J. J. Studies on the genus Helicometrina Linton, 1910 (Trematoda: Digenea: Allocreadiidae). J. Parasit. 46 5 Sect. 2: 13. [Abstract].

**Deevey, G. B.** The zooplankton of the surface waters of the Delaware Bay region. Bull. Bingham oceanogr. Coll. 17: 1-53 19 figs. [Russian summary].

De Giusti, D. L. & Nasir, P. Trematode parasites of the fish family Gobiidae from Naples, Italy and Bimini, B.W.I. J. Parasit. 46 5 Sect. 2: 13. [Abstract].

De Grisse, A. Meloidogyne kikuyensis n. sp., a parasite of Kikuyu grass (Pennisetum clandestinum) in Kenya. Nematologica 5: 303–308 1 pl. 3 figs.

Dennewald-Pescatore, M. A propos de la formule occilaire des population luxembourgeoises de *Espobdella ectoculata*, Linné. Arch. Inst. Grand. Duc. Luxemb. n.s. 26 1959: 195–197 figs.

Deubert, K.-H. (1). Über den Einfluss landwirtschaftlicher Kulturpflanzen auf die freilebenden Nematoden. Z. Bakt. (2) 113: 340-344 1 fig.

Deubert, K.-H. (2). Untersuchungen über das Auftreten freilebender Nematoden in Fruchtfolgen (vorläufige Ergebnisse). Nematologica Supp. II: 28.

Dewhirst, L. W., Trautman, R. J., Pistor, W. J. & Reed, R. E. Studies on ante-mortem diagnostic procedures in bovine cysticercosis infections. J. Parasit. 46 5 Sect. 2: 10–11. [Abstract].

D'Herde, J., Brand, J. van den & Gillard, A. Control of Pratylenchus penetrans (Cobb), causal agent of rootrot in lilies. Nematologica Suppl. II: 64-67 1 fig.

Diamond, L. S. & Douvres, F. W. Cultivation of parasitic stages of the swine nematodes Hyostrongylus rubidus and Oesophagostonum quadrispinulatum (O. longicaudum) free of microbial associates. J. Parasit. 46 5 Sect. 2: 25. [Abstract].

Diaz Ungria, C., Homez, J. & Péna, B. Un cestode del gato, nuevo para Venezuela. Bol. Inst. Inv. Vet. 12: 67-68 6 figs.

Diaz-Ungria, C. & Rodrigo, A. G. Revision del género Polyacanthorhynchus Travassos, 1920 (Acantho-cephala), con descripción de una especie neuva. in Libro homenaje at Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D. F. (Instituto Politecnico Nacional): 429-433 figs.

Diaz-Ungria, C. see Inglis, W. G.

Diaz-Ungria, C. see Jordano, D.

Diaz-Ungria, C. see Voge, M.

**Dickson**, W. M. & **Dunlap**, J. S. The action of phenothiazine on the metabolism of infective nematode larvae. J. Parasit. **46**: 867–872.

Dilko, N. I. & Merkusheva, I. V. [Parasitic fauna of Myopotamus coppus Molina in Belorussia]. Dokl. Akad. Nauk. Beloruss. S.S.R. 4 10: 441-443. [In Russian].

Dineley, D. L. & Rhodes, F. H. T. Conodont horizons in the West and South West of England. Geol. Mag. 93 1956: 242-248 figs.

Dineley, D. L. see Rhodes, F. H. T.

Dinnik, J. A. & Dinnik, N. N. (1). Effect of the seasonal variations of temperature on the development of Fasciola gigantica eggs in the Kenya highlands. Bull. épizoot. Dis. Afr. 7 1959: 357-369 2 figs.

Dinnik, J. A. & Dinnik, N. N. (2). Development of Camperius exoporus Maplestone (Trematoda: Gastro-thylacidae) in a snail host. Parasitology 50: 469-480 8 figs.

Dinnik, N. N. see Dinnik, I. A.

Dissanaike, A. S. & Fernando, C. H. Parathelphusa ceylonensis C. H. Fern., second intermediate host of Pleurogenoides sitapurii (Srivastava). J. Parasit. 46: 889.

Dobbin, J. E. see Teixeira de Freitas, J. F.

Doby, J.-.M. & Bernard, C. Galvanotaxie chez la larve de Strongyloides stercoralis Bavay, 1876. Ann. Parasit. hum. comp. 35: 432-434 1 fig.

Dodin, A., Capron, A. & Brygoo, E. R. Enzymes de Schistosoma mansoni (Sambon, 1907). Mise en évidence qualitative d'une histaminooxydase et d'une succinodéshydrogénase chez la cercaire in vivo, et le schistosome adulte in vitro. C.R. Soc. Biol. Paris 154: 575-578.

Dollfus, R. P. (1). Cestodes et Acanthocéphale d'oiseaux récoltés au Pérou par le Dr. Jean Dorst. Bull. Soc. zool. Fr. 84 1959 [1960] : 384-395 13 figs.

Dollfus, R. P. (2). Distomes des chaetognathes. Bull. Inst. Pêch. marit. 4: 19-45 24 figs.

Dollfus, R. P. (3). Recherches expérimentales sur Nicolla gallica (R.-Ph. Dollfus 1941) R.-Ph. Dollfus 1958, sa cercaire cotylicerque et sa métacercaire progénétique. Observations sur la famille des Coitocaecidae Y. Osaki 1928, s.f., Coitocaecinae F. Poche 1926 Trematoda Podocotyloidea et sur les cercaires cotylicerques d'eau douce et marines (suite et fin). Ann. Parasit. hum. comp. 35: 65-117 figs. 12-37.

**Dollfus,** R. P. (4). Recherches sur le développement et l'identification de *Plagiorchis (Multiglandularis) cirratus* (Rudolphi 1802). II. Description et identification. Ann. Parasit. hum. comp. **35**: 282–291 l fig.

Dollfus, R. P. (5). Transformation de Dihemistephanus lydiae (M. Stossich 1896) A. Looss 1901 en Stenocollum fragile (Edwin Linton 1900) J. Stafford 1904, par macération. Ann. Parasit. hum. comp. 35: 528-537 5 figs.

**Dollfus,** R. P. (6). Critique de récentes innovations apportées a la classification des Accacoellidae (Trematoda-Digenea). Observations sur des metacercaires de cette famillè). Ann. Parasit. hum. comp. **35**: 648–671 4 figs.

**Dollfus,** R. P. (7). Sur *Hemiurus communis* T. Odhner 1905 (Trematoda Digenea, Hemiuridae). Ann. Parasit. hum. comp. **35**: 704–712 5 figs.

Dollfus, R. P. (8). Sur un Distome de la Sole commune, Solea solea (L.), en Méditerranée, appartenant à un genre connu jusqu' à présent seulement des Tortugas (Floride). Vie et Milieu 11: 188–194 3 figs.

**Dollfus**, R. P. (9). Sur un trématode (genre *Isopar-orchis*), agent pathogène de la maladie de la "Tache d'Encre" chez des poissons du Vietnam. Bull. Soc. Path. exot. 52: 791–803.

Dollfus, R. P. (10). Groupement des espèces dans la sous-famille Opisthioglyphina R. Ph. Dollfus, 1949. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 113–117.

Dollfus, R. P. (11). Sur trois Helminthes (Distomien, Tétrarhynque, Palaeacanthocéphale) d'un Melanoglaea uentalis K. Barnard 1941, poisson téléostéen. Bull. Inst. franç. Afr. noire 22A: 385-394 6 figs.

Dollfus, R. P. & Dalens, H. Prosthorhynchus cylindracsus (Goeze 1782) au stade juvénile, chez un isopode térrestre Acanthocephala-Polymorphidae. Ann. Parasit. hum. comp. 35: 347-349 2 figs.

Donner, J. Bemerkungen zur Rädertierart Synchasta oblonga Ehrenb. 1832. Verh. zool.-bot. Ges. Wien 98-99 1959: 26-30 2 figs.

8

C

Dougherty, E. C., Solberg, B. & Harris, L. G. Synxenic and attempted axenic cultivation of rotifers. Science 132: 416-417.

Dougherty, E. C. see Nicholas, W. L.

Douvres, F. W. (1). The in vitro cultivation of some gastrointestinal nematodes of cattle and sheep. J. Parasit, 46 5 Sect. 2: 25, [Abstract].

**Douvres,** F. W. (2). Influence of intestinal extracts and sera from cattle infected with *Oesophagostomum radiatum* on the *in vitro* cultivation of this nematode: preliminary report. J. Parasit. 46 5 Sect. 2: 25-26. [Abstract].

Douvres, F. W. see Diamond, L. S.

Douvres, F. W. see Lucker, J. T.

Dow, V. E. Magnetic separation of Conodonts. J. Paleont. 34: 738-743 figs.

Dragos, M. see Pop, V.

**Dresscher**, T. G. N. & **Engel**, H. (1). De medicinale bloedzuiger. Natura, Amst. 57: 171-173 2 figs.

Dresscher, T. G. N. & Engel, H. (2). De Nederlandse bloedzuigers (Hirudinea). Wet. Med. ned. natuurh. Veren. No. 39: 1-60 39 figs.

Dropkin, V. H., Smith, W. L., Jr. & Myers, R. F. Recovery of nematodes from infected roots by maceration. Nematologica 5: 285-288 2 pls.

Dubashi, P. J. see Tembe, V. B.

Dubinins, M. N. The natural system of the genus Schistocephalus Creplin (Cestoda, Ligulidae). Zool. Zh. 38 1959: 1498–1517 6 figs. [English summary].

Dubinina, M. N. & Kulakova, A. P. Materials to the parasitifauna of Passeriformes in the delta of the Volga River. Mag. Parasit., Leningr. 19: 344-372 8 figs.

Dubois, G. (1). Contribution à l'étude des Trématodes de Chiroptères. Revision du sous-genre Prosthodendrium Dollfus 1931 et des genres Lecithodendrium Looss 1896 et Pycnoporus Looss 1899. Rev. suisse Zool. 67: 1-80 9 figs.

Dubois, G. (2). Redécouverte de Scaphanocephalus expansus (Creplin 1842) [Trematoda: Heterophyidae]. Ann. Parasit. hum. comp. 35: 426-427.

Dubois, G. (3). Le genre Pseudoneodiplostomum Dubois, 1936 (Trematoda: Strigeida). in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 119-122.

Dudek, J. see Ryšavý, B.

**Duke,** B. O. L. (1). Studies on loiasis in monkeys. II. The population dynamics of the microfilariae of *Loa* in experimentally infected drills (*Mandrillus leuophaeus*). Ann. trop. Med. Parasit. **54**: 15–31 8 figs.

Duke, B. O. I.. (2). Studies on loiasis in monkeys. III. The pathology of the spleen in drills (Mandrillus leucophaeus) infected with Loa. Ann. trop. Med. Parasit. 54: 141-146 2 pls.

Dumitresco, H. Contributions à la connaissance des Polychétes de la Mer Noire, specialement des eaux prébosphoriques. Trav. Mus. Hist. nat. "Gr. Antipa" 2: 69-85 5 figs. map.

Dunagan, T. T. Cercariae belonging to the Opisthorchioidea. Proc. helminth. Soc. Wash. 27: 44-52.

Duncan, A. The spawning of Arenicola marina (L.) in the British Isles. Proc. zool. Soc. Lond. 134: 137-156 4 figs.

Dunlap, J. S. see Dickson, W. M.

Dunn, M. C. & Brown, H. W. The effect of pregnancy on Aspiculuris tetraptera infections in albino mice. J. Parasit. 46 5 Sect. 2: 37. [Abstract].

Dunnett, J. M. Potato breeders' strains of root eelworm (*Heterodera rosiochiensis* Woll.). Nematologica Suppl. II: 84-94.

Durchon, M. Sur la polymorphisme présenté par quelques Néréidiens (Annélides Polychètes) au moment de la reproduction. Bull. Soc. Hist. nat. Afr. noire 46 1955: 180-194 1 pl. 3 figs.

Durel, B. see Megemont, C.

Dusaric, D. G. see Lewert, R. M.

Dusaric, D. see Mandlowitz, S.

Duxbury, R. E., Moon, A. P. & Sadun, E. H. Susceptibility and resistance of Anopheles quadrimaculatus to Dirofilaria uniformis. J. Parasit. 46 5 Sect. 2: 27-28. [Abstract].

Duxbury, R. E. see Moon, A. P.

**Dvořáková**, M. (1). Einige neue und interessante Rädertiere aus der Tschechoslowakei. Mém. Soc. zool. tchécosl. 24: 215-221 7 figs.

**Dvořáková**, M. (2). Rotatoria des viviers dans les environs de Sumbark et Senov (district Ostrava). Prirod. Cas. Slezský 21: 425–432 4 figs.

Edelstein, I. A. On the distrubances of chemoreception caused by ascariodiosis. Vestzi Akad. Nauk. Belorus. S.S.R. (Biol.) I 89-102 5 figs. [In Ukrainian].

Edeson, J. F. B. see Laing, A. B. G.

Edeson, J. F. B. see Ramachandran, C. P.

Edmonds, S. J. Some Australian Echiuroids (Echiuroidea). Trans. roy. Soc. S. Aust. 83: 89–98 2 pls. 5 figs.

Efremenko, V. On the elaboration of systematic measures of controlling the potato nematode. Acta parasit. lithuan. 2 1959 [1960]: 101-105.

Eichler, W. Gekürzte systematische Übersicht der wichtigster Parasitengruppen von veterinarmedizinischer Bedeutung. Acta vet. hung. 7 1957: 465-472.

Eisa, A. M. & Rubin, R. Bephenium hydroxynaphthoate: a new and promising gastro-intestinal anthelmintic for cattle. J. Parasit. 46 5 Sect. 2: 8. [Abstract].

Ellenby, C. & Gilbert, A. B. (1). Progress in the study of the physiology of the hatching factor of the potato root eelworm, Heterodera rostochiensis Wollenweber. Nematologica Suppl. II: 106–111 4 figs.

Ellenby, C. & Gilbert, A. B. (2). A convenient modification of the dilution hatching trial for the potato-root eelworm, *Heterodera rostochismsis* Wollenweber. J. Helminth. 34: 99-102 1 fig. 1 pl.

Elliott, G. F. see Davis, A. G.

Ellison, jr., S. P. see Ladd, H. S.

Engel, H. see Dresscher, T. G. N.

Ennor, A. H. see Rosenberg, H.

Enzie, F. D., Colglazier, M. L., Whitmore, G. & Thompson, D. E. Effectiveness of three management systems on parasitism in lambs. III. Resistance of Haemonchus contortus to phenothiazine. J. Parasit. 46 5 Sect. 2: 41. [Abstract].

Enzie, F. D. see Kates, K. C.

Enzie, F. D. see Turner, J. H.

Epshtein, V. M. see Lukin, E. L.

Erasmus, D. A. A new Furcocercaria, Corcaria roathensis, from British freshwaters. J. Helminth. 34: 85-92 5 figs.

Ercolini, A. Nota sistematica sopra la specie Aeolosoma viride Steph. (Aeolosomatidae, Oligocheti, Microdrili) rinvenuta in Piemonte. Boll. Ist. Zool. Univ. Torino 6 1958-60: 145-153 1 fig.

Ergens, R. (1). Skrjabillanus Schigin et Schigina 1958, eine neue Gattung der Nematoden (Camallanata Chitwood 1936) für die Tschechoslowakei. Mém. Soc. 2001. tchécosl. 24: 230–231 2 figs. [German summary].

Ergens, R. (2). Gelmintofauna nekotorych ryb Albanä. Česk. Parasit. 7: 49–90 29 figs. [English summary].

Ergens, R. see Erhardová, B.

Erhardová, B. (1). Zu den Entwicklungszyklen einiger Geohelminthen. Vestn. českosl. zool. Společ 24: 361-370 4 figs.

Erhardová, B. (2). K voprosu gelmintofauny myševidnych gryzunov v Albanii. Česk. Parasit. 7: 91-96 2 figs. [German summary].

Erhardová, B., Ergens, R., Gjini, N., Prokopič, J. & Ryšavý, B. Contribution à la connaissance des parasites intestinaux chez les enfants de l'age préscolaire en Albanie. Česk. Parasit. 7: 97-98.

Erhardová, B., Luli, M., Prokopič, J., & Ryšavý, B. K voprosu izučenija gelmintofauny domašnych zivotnych v Albanü. Česk. Parasit. 7: 99–114 6 figs. [German summary].

Erickson, H. R. see Swanson, G. A.

Eristavi, M. S. Nizhnemelovaya fauna Ghruzii. Monog. Inst. Geol. Min. Akad. Nauk Gruz. S.S.R. 6 1955: 1–224 8 pls.

Ershov, V. S. Problem of immunisation of domestic animals against helminthiasis. Trud. Inst. Zool. Alma-Ata 12: 96-103. [In Russian].

Esser, R. P. Three additional species in the genus Hemicricomemoides Chitwood and Birchfield 1957 (Nemata: Tylenchida). Nematologica 5: 64-71 2 firs.

Etges, F. J. (1). On the life history of Prosthodendrium (Acanthatrium) anaplocami n. sp. (Trematoda: Lecithodendriidae). J. Parasit. 46: 235-240 l pl.

Etges, F. J. (2). The status of the genera Acanthatrium Faust, 1919, and Prosthodendrium Dollfus, 1931 (Trematoda: Lecithodendriidae). J. Parasit. 46: 525-527 8 figs.

Etges, F. J. & Sharma, M. L. Studies on the genus Metorchis Looss, 1899 (Trematoda: Opisthorchiidae). J. Parasit. 46 5 Sect. 2: 21. [Abstract].

Etges, F. J. see Fay, C. M.

Ethington, R. L. (1). Conodonts of the Ordovician Galena formation. J. Paleont. 33 1959: 257-292 3 pls. figs.

Ethington, R. L. (2). Rhynchognathodus, new name for the Ordovician conodont Rhynchognathus, preoccupied. J. Paleont. 33 1959: 1128.

Ethington, R. L. & Furnish, W. M. (1). Ordovician conodonts from Northern Manitoba. J. Paleont. 33 1959: 540-546 l pl. fig.

Ethington, R. L. & Furnish, W. M. (2). Upper Ordovician conodonts from southern Manitoba. J. Paleont. 34: 265-274 l pl.

Ethington, R. L., Furnish, W. M. & Markewicz, F. J. Ordovician conodonts in New Jersey. J. Paleont. 32 1958: 763-765 1 fig.

Euzet, L. & Raibaut, A. Le développement postlarvaire de Squalonchocotyle torpedinis (Price 1942) (Monogenea, Hexabothriidae). Bull. Soc. neuchatel. Sci. nat. 83: 101-108 6 figs.

Euxet, L. & Trilles, J.-P. (1). Octolābea turchinii n. g. n. sp. (Plectanocotylidae) un monogène nouveau, parasite de *Pristhedion cataphractum* (L.). Ann. Parasit. hum. comp. 35: 504-508 3 figs.

Euzet, L. & Trilles, J.-P. (2). Sur deux monogènes nouveaux de Sphyraena sphyraena (L.) (Teleostei Sphyraena idae). Bull. Soc. Zool. Fr. 85: 189–198 9 figs.

Euzet, L. & Williams, H. H. A re-description of the trematode Calicotyle stassichii Braun, 1899, with an account of Calicotyle palombi sp. nov. Parasitology 50: 21-30 11 figs.

Evens, F. see Meyus, H.

Everard, C. O. R. The salinity tolerance of Panagrolaimus rigidus (Schneider, 1866), Thorne, 1937, and Panagrolaimus salinus Everard, 1958. (Nematoda: Panagrolaiminae. Ann. Mag. nat. Hist. (13) 1: 53-59 2 figs.

Ewert, A. & Olson, L. J. Immunological tolerance studies with mice and *Trichinella*. J. Parasit. 46: 849-854

Ewert, A. see Olsen, L. J.

Facey, R. V. & Marsden, P. H. Fascioliasis in man: an outbreak in Hampshire. Brit. med. J. No. 5199: 619-625.

Fagasiński, A. & Piusiński, W. Infestation of Tetrathyridism elongatum (Blumberg, 1882) in a dog. Wiad. Parazyt. Wrocław 6: 533-536. [English summary].

Fain, A. Nouveaux schistosomes d'oiseaux du genre Gigantobilharzia Odhner. Ann. Parasit. hum. comp. 35: 292-304 8 figs.

Farooqui, H. U. Cathaemaisioides caballeroi n. sp. (Cathaemasiidae-Trematoda) from an Indian Stork, Kenorhynchus asiaticus (Latham). in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960, Mexico, D.F. (Instituto Politecnico Nacional): 123–127 2 figs.

Farr, M. M. see Gardiner, J. L.

Faust, E. C. & Ramos, D. B. Extraordinario hallazgo de una nueva especie de Neochordodes (Gordiácea) en Colombia. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 523–527 1 pl.

Fauvel, P. Note sur les Sabellariidae des Côtes Occidentales de l'Afrique. Mém. Soc. nat. Sci. Chérbourg 48 1959 : 19-31.

Fay, C. M. & Etges, F. J. Preliminary studies on the ecology of *Leidynema appendiculata* (Leidy, 1850) Nematoda: Oxyuroidea). J. Parasit. 46 5 Sect. 2: 26. [Abstract].

Fay, R. O. Generic and subgeneric homonyms of conodonts. J. Paleont. 33 1959: 195-196.

Fernando, C. H. see Dissanaike, A. S.

Ferreira, E. G. & Gomes, J. A. Bilharziose o foco de Malanje (Angola). (Subsidio para o conhecimento das bilharziosis em Angola). An. Inst. Med. trop. Lisbon 16 1959: 407-432. [English and French summaries].

Fiala, L. see Sládeček, V.

Field, A. C., Brambell, M. R. & Campbell, J. A. Spring rise in faecal worm-egg counts of housed sheep, and its importance in nutritional experiments. Parasitology 50: 387-399 3 figs.

Fisher, F. M., Jr. On Acanthocephala of turtles, with the description of *Neoechinorhynchus emyditoides* n. sp. J. Parasit. **46**: 257-266 2 pls. 1 fig.

Fitzgerald, P. R. The pathology occurring in lambs as a result of inoculation with embryonated eggs of Ascaris lumbricoides var. suum. J. Parasit. 46 5 Sect. 2:30. [Abstract].

Flores-Barroeta, L. & Hidalgo-Escalante, E. Cestódos de vertebrados. VII. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 357-376 20 figs.

Forstner, M. J. Ein Beitrag zur Kenntnis parasitischer Nematoden aus griechischen Landschildkröte. Z. Parasit. 20: 1-22 27 figs.

Fortmeyer, H. P. see Wetzel, R.

Foster, A. O. Parasitological speculations and patterns. J. Parasit. 46: 1-9.

Fotedar, D. N. On a new species of Oxysomatium Railliet and Henry, 1913 and some notes on the genera Oxysomatium and Aplectana. J. Helminth. 34: 141-150 4 figs.

Frandsen, J. C. & Grundmann, A. W. (1). Brachylaims microti from the deer mouse in Utah. J. Parasit. 46: 314.

Frandsen, J. C. & Grundmann, A. W. (2). The parasites of some amphibians of Utah. J. Parasit. 46: 678.

Frandsen, J. C. see Grundmann, A. W.

Fraser, P. G. (1). The occurrence of Diphyllobothrium in trout, with special reference to an outbreak in the west of England. J. Helminth. 34: 59-72 1 fig. 1 pl.

Fraser, P. G. (2). The form of the larval hooks as a means of separating species of Diphyllobothrium. J. Helminth. 34: 73-80 2 figs. 1 pl.

Fraser, P. G. (3). On Diphyllobothrium medium (Fahmy, 1954) parasitic in trout in Great Britain. J. Helminth. 34: 193-204 6 figs.

Freeman, R. S. Another hymenolepid with great morphological variation, Hymenolepis bennetti n. sp. (Cestoda) from Napaeozapus insignis algonquinensis Prince. Canad. J. Zool. 38: 737-743 6 figs.

Freeman, R. S. & Wright, K. A. Factors concerned with the epizootiology of Capillaria hepatica (Bancroft, 1893) (Nematoda) in a population of Peromyscus maniculatus in Algonquin Park, Canada. J. Parasit. 46: 373–382.

Friedl, F. E. Induced hatching of operculate eggs. J. Parasit. 46: 454.

Friedrich, H. Bemerkungen über die Gattung Micrura Ehrenberg 1831 und zur Klassifikation der Heteronemertinen nebst vorläufigem Bestimmungsschlüssel. Veröff. Inst. Meeresforsch. Bremerhaven 7: 48-62.

Fritts, D. H. see Marquardt, W. C.

Froyd, G. (1). Cysticercosis and hydatid disease of cattle in Kenya. J. Parasit. 46: 491-496.

Froyd, G. (2). The incidence of liver flukes (Fasciola gigantics) and hydatid cysts (Echinococcus granulosus) in Kenya cattle. J. Parasit. 46: 659-662.

Fukui, T. A short preliminary note on parasites of the North Pacific salmonoid fishes. in Libro homenaje al Dr. Eduardo Caballero y Caballero 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 521– 522.

Furmaga, S. see Bezubik, B.

Furnestin, M.-L. (1). Zooplancton du golfe du Lion et de la côte orientale de Corse. Rev. Trav. Inst. Pêches marit. 24: 153-252 66 figs.

Furnestin, M.-L. (2). Observations sur quelques échantillons de zooplancton d'Afrique occidentale. Bull. Inst. franç. Afr. noire 22A: 142–151 2 figs.

Furnish, W. M. see Ethington, R. L.

Furnish, W. M. see Stone, G. L.

Gabriel, A. see Lender, T.

Gadea, E. (1). Contribución al estudio de los Nematodes marinos. Nematodos alguícolas de la costas mediterranéas de España. Publ. Inst. Biol. apl. Barcelona 31: 33-91 8 figs. [English summary].

Gadea, E. (2). Estudio comparativo de la nematofauna de las algas litorales de las costas mediterránea y atlántica de España. Bol. Soc. españ. Hist. nat. Secc. Biol. 58: 275-282: [English summary].

Gaffney, T. see Rosenberg, H.

Gagarin, V. G. Helminths of wild ruminants of Kirgizia. Izv. Akad. Nauk. Kirgiz. S.S.R. (Biol.) 1: 1959 133-145. [In Russian].

Gagarin, V. G., Ablasov. N. A. & Solovyev, G. V. Infection of sheep in Kirgizia with Anoplocephalids. Izv. Akad. Nauk. Kirgiz. S.S.R. (Biol.) 1 1959: 111-131. [In Russian].

Gagarin, V. G. & Steshenko, V. M. On the role of protostongylids in ethiology of the lung diseases in sheep and goat. Izv. Akad. Nauk. Kirgiz. S.S.R. 1 1959: 145-158 10 figs. [In Russian].

Gagliano, E. see Ricci, M.

Gallagher, J. J. A note to rotifer investigators. Amer Midl. Nat. 63: 247.

Galliard, R. Filaires nouvelles du type bancroftimalayi chez l'homme et l'animal dans l'aire Afrique Orientale-Océan Indien. Bull. Soc. Path. exot. 52: 578-582 1 fig.

Galliford, A. L. Notes on the microscopic fauna and flora of the Leeds-Liverpool Canal in South-West Lancashire. Proc. Lpool. Nats.' Fld. Cl. No. 99: 23-28.

Gambino, J. J. & Heyneman, D. Specificity and speciation in the genus Cyrtosomum (Nematoda: Atractidae). Amer. midl. Nat. 63: 365–382 7 figs.

Gansen-Sernal, P. van. Structure du jabot et du gésier d'Eisenia foetida Savigny (Lombricien). Bull. Soc. zool. Belg. 89 1958-59 [1960]: 341-363 10 figs.

Gardiner, J. L., Chitwood, M., Farr, M. M. & Short, D. A. Historical resumé of the Helminthological Society of Washington. Proc. helminth. Soc. Wash. 27: 241-259.

d R

2

d 2

K fr

N W

Pro

Garoian, G. S. Schistocephalus themasi, n. sp. (Cestoda: Diphyllobothriidae) from fish-eating birds. Proc. belminth. Soc. Wash. 27: 199-202 5 figs.

Gates, G. E. (1). On natural regeneration by earthworms of the megascolecid genus *Perionyx* Perrier, 1882. Wasmann J. Biol. 18: 291-296.

Gates, G. E. (2). On another biclitellate earthworm. Amer. midl. Nat. 63: 418-423.

Gayot, G. see Callot, J. V.

George, C. J. The affinities and evolution of the major triploblastic phyla of animals. J. Anim. Morph. Physiol. 7: 9-14.

Gerlach, S. A. Neues Meeres-Nematoden aus dem Supralitoral der deutschen Küsten. Int. Rev. ges. Hydrobiol. 44 1959: 463-467 4 figs.

Getsova, A. B., Timofeeva-Resovskaya, E. A. & Timofeev-Resovskii, N. V. Effect of ethylene-diaminetetracetate on the accumulation of different radioisotopes from an aqueous solution, by leeches and gnats. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 130: 53-54 2 figs. [Dokl. Akad. Nauk S.S.S.R. 130: 440-442].

Gherman, I. Dégéneréscence des oeufs d'Hymenolepis nana observée chez les personnes en voie de guérison spontanée. Ann. Parasit. hum. comp. 35: 755-756 I pl

Ghirardelli, E. (1). Sulla biologia della riproduzione in Spadella cephaloptera Busch. (Chaetognata). R.C. Accad. Bologna Cl. Sci. Fis. (11) 1 1954: 166-183 2 pls.

Ghirardelli, E. (2). L'apparato riproduttore femminile nei Chetognathi. R.C. Accad. Naz. XL. Roma (4) 10: 103-147 14 pls. 5 figs.

Ghirardelli, E. (3). Habitat e biologia della riproduzione nei chetognati. Arch. Oceanogr. e Limnol. 11: 287-304. [English summary].

Ghirardelli, E. see Pasquini, P.

Ghosh, G. S. & Behura, B. K. Preservation of earthworms for class demonstrations. Sci. & Cult. 26: 47.

Gibbs, H. C. A redescription of Avitellina arctica Kolmakov. 1938 (Anoplocephalidae: Thysanosominae), from Rangifer arcticus arcticus in Northern Canada. J. Parasit. 46: 624-628 2 pls.

Gilbert, A. B. see Ellenby, C.

**Gillard,** A. Rotiferes d'une eau saumatre a Nieuport (Fosse aux Ruppia). Bull. Inst. Sci. nat. belg. **35** 43 1959: 1-7 map.

Gillard, A. see D'Herde, J.

Gilles, H. M. see McGregor, I. A.

Gilmore, R. G. & Allen, R. W. Helminth parasites of pronghorn antelope (Antilocapra americana) in New Mexico with new host records. Proc. helminth. Soc. Wash. 27: 69-73.

Gjini, N. see Erhardová, B.

Glaessner, M. F. Precambrian fossils from South Australia. Rep. 21st Internat. Geol. Cong. 22: 59-64.

Glaessner, M. F. & Daily, B. The geology and late Precambrian fauna of the Ediacaru Fossil Reserve. Rec. S. Aust. Mus. 13 1959: 369-401 6 pls., 2 figs.

Gleason, N. N. Human sparganosis in Alabama. J. Parasit. 46: 230.

Glenister, A. T. The Conodonts of the Ordovician Maquoketa Formation in Iowa. J. Paleont. 31 1957: 715-736 4 pls. figs.

Gnedina, M. G. & Osipov, A. N. The elucidation of the life cycle of the nematode Parafilaria multipapillosa (Cond. et Drouil., 1878), a parasite of the horse. Dokl. Akad. Nauk S.S.R. (Transl.) Biol. Sci. 131: 285–286 3 figs. [Dokl. Akad. Nauk S.S.R. 131: 1219–1221].

Goffart, H. (1). Die Kutikularstruktur des Hinterendes bei der Gattung *Heterodera* als Artcharakteristikum. Verh. dtsch. zool. Ges. 1959 [1960]: 387–393 6 figs.

Goffart, H. (2). Phytonematologie in Deutschland. Mitt. biol. BundAnst. Berl. No. 99: 14-24 3 figs.

Goffart, H. (3). Populationsveränderungen des Kartoffelnematoden (Heterodera rostochiensis Woll.) beim Anbau nematodenresistenter und nematodenanfälliger Kartoffelsorten unter Berücksichtigung des Auftretens aggressiver Biotypen. Nematologica Suppl. II: 76– 83 1 fig.

Goffart, H. (4). Rückblick über die Entwicklung des Institute für Hackfruchtkrankheiten und Nema.odenforschung. Mitt. biol. BundAnst. Berl. No. 99: 5-14 3 figs.

Goffard, H. (5). Die taxonomische Bewertung morphologischanatomischer Merkmale bei den Zysten der Gattung *Heterodera* (Nematoda). Mitt. biol. BundAnst. Berl. No. 99: 24-51 5 pls. 4 figs.

Goldberg, A. & Lucker, J. T. Effects on calves of gastrointestinal nematodes naturally acquired. Proc. helminth. Soc. Wash. 27: 157-160.

Golden, A. M. & Shafer, T. Survival of emerged larvae of the sugar-beet nematode (*Heterodera schachtii*) in water and in soil. Nematologica 5: 32-36 l fig.

Golikova, M. N. Biology of some species of tapeworms of aquatic birds. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 131: 287-288 2 figs. [Dokl. Akad. Nauk S.S.S.R. 131: 1222-1224].

Golvan, Y. J. (1). Le phylum des Acanthocephala. Troisieme note. La classe des Palaeacanthocephala (Meyer 1931) (à suivre). Ann. Parasit. hum. comp. 35: 138–165 18 figs.

Golvan, Y. J. (2). Le phylum des Acanthocephala. Troisième note. La classe des Palacacanthocephala (Meyer, 1931) (suité). Ann. Parasit. hum. comp. 35: 350-386 38 figs.

Golvan, Y. J. (3). Le phylum des Acanthocephale. Troisième note. La classe des Palacacanthocephala (Meyer 1931) (suite). Ann. Parasit. hum. comp. 35: 575-593 9 figs., 713-723 3 figs.

Gomberg, H. J. see Villella, J. B.

Gomes, F. G. see Azevedo, J. F de.

Gomes, J. A. see Ferreira, E. G.

Goncalves da Costa, S. C. Sôbre um novo gênero da familia Cobboldinidae Skrjabin, 1948 (Nematoda). Atas Soc. Biol. Rio Jan. 4: 62-63.

Gontcharoff, M. Le développement post-embryonnaire et la croissance chez *Lineus ruber* et *Lineus viridis* (Nemertes Lineidae). Ann. Sci. nat. (Zool.) (12) 2: 225-279.

Goodchild, C. G. Effects of starvation and lack of bile upon growth, egg production and egg viability in established rat tapeworms, *Hymenolepis diminuta*. J. Parasit. 46 5: 615-623 1 fig. Goodchild, C. G. & Kirk, D. E. The life history of Spirorchis elegans Stunkard, 1923 (Trematoda: Spirorchiidae) from the painted turtle. J. Parasit. 46: 219– 229 1 pl.

Goodey, J. B. (1). Rhadinaphelenchus cocophilus (Cobb, 1919) n. comb., the nematode associated with "redring" disease of coconut. Nematologica 5: 98-102 l fig.

Goodey, J. B. (2). The classification of the Aphelenchoidea Fuch, 1937. Nematologica 5: 111-126.

Goodey, J. B. (3). Observations on the effects of the parasitic nematodes Ditylenchus myceliophagus, Aphelenchuides composticola and Paraphelenchus myceliophthorus on the growth and cropping of mushrooms. Ann. appl. Biol. 48: 655-664 22 figs.

Goodey, J. B., Peacock, F. C. & Pitcher, R. S. A redescription of Xiphenema diversicaudatum (Micoletzky, 1923 & 1927) Thorne, 1939 and observations on its larval stages. Nematologica 5: 127-135 3 figs.

Goodey, J. B. & Seinhorst, J. W. Further observations and comments on the identity of Rotylenchus robustus (de Man, 1876) Filipjev, 1934 with a description of a proposed neotype and a new definition of Rotylenchus goodeyi. Nematologica 5: 136-148 2 figs.

Gould, S. E. see Villella, J. B.

Grabda, B. Life cycle of Haematoloechus similis (Looss, 1899) (Trematoda-Plagiorchiidae). Acta Parasit. polon. 8: 357–367 3 figs.

Graham, G. L. Parasitism in monkeys. Ann. N.Y. Acad. Sci. 85: 842-860 10 figs.

Grain, J. see Puytorac, P. de.

Grainger, J. Safety in soil treatments for eelworm control. Nematologica Suppl. II: 6-12 1 pl. 3 figs.

Green, J. Zooplankton of the River Sokoto. The Rotifera. Proc. zool. Soc. Lond. 135: 491-523 20 figs.

Green, J. see Holden, M. J.

Gresson, R. A. R. see Pantelouris, E. M.

Grétillat, S. (1). Cycle évolutif de Carmyerius dollfusi Golvan, Chabaud et Grétillat, 1957. Premières recherches. Formes larvaires et hôtes intermédiaires. epidemiologie de la gastrothylose bovine à Madagascar. Ann. Parasit. hum. comp. 35: 45-64 12 figs.

Grétillat, S. (2). Amphistomes (Trématodes) des ruminants domestiques de la Republique du Tchad. Description d'un Gastrochylacidae nouveau Camperius graberi n. sp. Ann. Parasit. hum. comp. 35: 509-527 9 figs.

Griffo, J. V., jr. see Layne, J. N.

Grocott, R. G. see Caballero y C., E.

Grodhaus, G. Some schistosome cercariae from Gyraulus. J. Parasit. 46 5 Sect. 2: 33. [Abstract].

Gross, P. R. & Spindel, W. Heavy water inhibition of cell division: An approach to mechanism. Ann. N.Y. Acad. Sci. 90: 503-522 8 figs.

Gross, W. (1). Über die Basis der Conodonten. Paläont. Z. 31 1957: 78-91 3 pls. figs.

Gross, W. (2). Über die Basis bei den Gattungen Palmatolepis und Polygnathus (Conodontida). Paläont. Z. 34: 40-58 figs.

Grundmann A. W. & Frandsen, J. C. (1). Definitive host relationships of the helminth parasites of the deer mouse, *Peromyscus maniculatus*, in the Bonneville basin of Utah. J. Parasit. 46: 673-677.

Grundmann, A. W. & Frandsen, J. C. (2). Capillaria bonnevillei, n. sp. (Nematoda: Trichuridae) from the Ord kangaroo rat in Utah. Proc. belminth. Soc. Wash. 27: 206-208 4 figs.

Grundmann, A. W. see Frandsen, J. C.

Grzywiński, L. Correlation between the experimental intestinal invasion and infection in poultry. Acta Parasit. polon. 8: 255–277.

Guaita, E. F. Quetognatos presentes en muestras antarticas y subantarticas. Rev. Biol. mar. 9 1959: 251-255.

Guérin, R. Observations ecologiques sur Convoluta roscoffensis Graff. Cah. Biol. mar. 1: 205-220 7 figs.

Guerrier, P. see Nigon, V.

Guevara, D. see Monteoliva, M.

Guilhon, J. Rôle des Limacidés dans le cycle évolutif d'Angiostrong ylus vasorum (Baillet, 1866). C.R. Acad. Sci Paris 251: 2252-2253.

Guoth, S. (1). Helminthofauna der Edelhirsche des Tatra-Nationalparks. Biológia, Bratislava 15: 366– 370. [German summary].

Guoth, S. (2). Helminthofauna des Alpensteinbocks (Capra iber L.) und der Bezoarziege (Capra agagrus Gm.) aus dem Tatra-nationalpark. Biológia, Bratislava 15: 421-426 l fig. [German summary].

Gupta, S. P. (1). Nematode parasites of vertebrates of East Pakistan. IV. Ascaroid nematodes from amphibia, birds and mammals. Canad. J. Zool. 38: 315-329 28 figs.

Gupta, S. P. (2). Nematode parasites of vertebrates of east Pakistan. V. Spirurid nematodes. Canad. J. Zool. 38: 575-584 20 figs.

Gupta, S. P. (3). Nematode parasites of vertebrates of East Pakistan. VI. Amplicaecum cacopi, Thelandros sp., Rhabdias ranae, and Oswaldocruzia melanosticti sp. nov., from frogs. Canad. J. Zool. 38: 745-750 14 figs.

Gupta, S. P. (4). Nematode parasites of vertebrates of East Pakistan. VII. Capillaria copyschi sp. nov. Canad. J. Zool. 38: 879–881 8 figs.

Gupta, S. P. (5). Nematode parasites of vertebrates of East Pakistan. VIII. On Artionema labiato-papillosa (Perroncito, 1882) Yeh. 1959 from the body cavity of hump back cattle. Canad. J. Zool. 38: 1051-1056 15 figs.

Gupta, N. K. & Singh, S. On a new Camallanus nematode from Lissemys (Punctata) punctata. Res. Bull. Panjab Univ. Science N.S. 10: 285-289 3 figs.

Güralp, N. see Mimioglu, M.

Guschanskaja, L. H. see Skrjabin, K. I.

Gussev, A. V. & Strelkow, J. A. Ancylodiscoides (Monogenoidea) of far-east sheat fishes (Silurus and Parasilurus). Trav. Inst. 200l. Acad. Sci. U.R.S.S. 28: 197-255 29 figs. [English summary].

Gustave, G., Laugier, R. & Lessertisseur, J. Sur un Problematicum du Lias inférieuer de la Haut-Marne: Siphonites heberti de Sap. Bull. Soc. géol. Fr. (6) 6 1957: 997-1000 figs.

Gvozdev, E. V. (1). On Pegosomum ixobrychi parasitizing in the liver of Ixobrychus minutus. Trud. Inst. Zool. Almz-Ata 14: 54-56 fig. [In Russian].

Gvozdev, E. V. (2). Helminths of ondatra in Kazakhstan. Trud. Inst. Zool. Alma-Ata 14: 57-60. [In Russian].

Gvozdev, E. V. & Agapova, A. I. On the formation of the present fauna of fish parasites in Balkhash-Iliisk basin. Trud. Inst. Zool. Alma-Ata 12: 183-191. [In Russian].

Haderlie, E. C. see Clark, R. B.

Hadzi, J. Über die Abstammung und die Verwandschaftsverhältnisse der Chaetognathen. Razpr. Slov. Akad. Znan. Umetn. 5 1959: 105–139. [German summary].

Haffner, K. von. Untersuchungen und Gedanken über das Gehirn und Kopfende von Polychaeten und ein Vergleich mit den Arthropoden. Mitt. hamburg. zool. Mus. Inst. 57 1959: 1-29 20 figs.

Hague, N. G. M. Control of plant parasitic nematodes. 3. The final eelworm density in soil as a means of assessing the efficacy of a fumigant. Nematologica Suppl. II: 13-21 2 figs.

Hague, N. G. see Warner, L. J.

Hahn, S. S., Kang, H. Y. & Hahn, Y. S. The anthelmintic effect of biphenium hydroxynaphthoate on intestinal helminths. J. trop. Med. Hyg. 63: 180-184.

Hahn, Y. S. see Hahn, S. S.

Haley, A. J. & Clifford, C. M. Age and infectivity of the filariform larvae of the rat nematode Nippostrongylus brasiliensis (Travassos, 1914). J. Parasit. 46: 579-582 l fig.

Haley, A. J. see Parker, J. C.

Hall, J. E. (1). Some lecithodendriid metacercariae from Indiana and Michigan. J. Parasit. 46: 309-316 l pl.

Hall, J. E. (2). Studies on virgulate Xiphidiocercariae from Indiana and Michigan. Amer. midl. Nat. 63: 226–245 36 figs.

Haller, W. Über die Einstufung der marinen Unterkreide der Bohrung Babekuhl. Ber. geol. Ges. 2 1957: 130–137 5 pls.

Hanks, J. E. A method for preparing the marine polychaete, *Pectinaria gouldi* (Verrill), for histological study. Trans. Amer. micr. Soc. 79: 470-471.

Hansen, E. L. see Nicholas, W. L.

Hansen, G. L., Yarwood, E. A. & others. Differential nutritional requirements for reproduction of two strains of *Caenorhabditis elegans* in axenic culture. Nematologica 5: 27-31.

Hansen, M F. see Wood, I. B.

Hanumantha-Rao, K. The problem of Mehlis's gland in helminths with special reference to Penetrocephalus ganapatii (Cestoda: Pseudophyllidea). Parasitology 50: 349–350.

Harinasuta, C. & Vajrasthira, S. Opisthorchiasis in Thailand. Ann. trop. Med. Parasit. 54: 100-105 l pl.

Harinasuta, C. see Vajrasthira, S.

Harkema, R. see Miller, G. C.

Harms, C. E. Some parasites of catfishes from Kansas. J. Parasit. 46: 695-701.

Harris, L. G. see Dougherty, E. C.

Hartman, O. (1). On account of the nereid worm Neanthes diversicolor, new combination in the Caspian Sea and its more extensive distribution. Zool. Zh. 39: 35-39 7 figs. [English summary]. Hartman, O. (2). Systematic account of some marine invertebrate animals from the deep basins of southern California. Part II. Allan Hancock Pacif. Exped. 22: 69-215 19 pls.

Hartman, O. & Barnard, J. L. The benthic fauna of deep basins off southern California: continued studies in the seaward and deeper basins. Allan Hancock Pacif. Exped. 22: 217-297 map.

Hartmann-Schröder, G. Polychaeten aus dem Roten Meer. Kieler Meeresforsch. 16: 69-125 21 pls. Hartog, C. den & Tulp, A. S. Hydrobiologische waarnemingen in Friesland. Levende Nat. 63: 109-120 7 figs.

Hasan, R. & Qasim, S. Z. The occurrence of Pallisentis basiri Farooqi (Acanthocephala) in the liver of Thiotogaster chuna (Ham.). Z. Parasit. 20: 152-156 1 fig.

Hasan, S. A. Some polychaetes from the Karachi coast. Ann. Mag. nat. Hist. (13) 3: 103-112 2 figs.

Hashimoto, Y. & Okaichi, T. Some chemical properties of nereistoxin. Ann. N.Y. Acad. Sci. 90: 667-673 3 figs.

Hass, W. H. (1). Upper Devonian conodonts of New York, Pennsylvania and interior States. J. Paleont. 32 1958: 765-769.

Hass, W. H. (2). Conodonts from the Chappel Limestone of Texas. Prof. Pap. U.S. geol. Surv. 294-J 1959: 365-399 5 pls.

Hass, W. H. see Cloud, jr., P. E.

Hatai, K. Interesting sand-pipes from the Miocene Toyoda Formation, Yamagata Prefecture, Japan. Trans. paleont. Soc. Japan 27 1957: 95-98 figs.

Hauenschild, C. Obligatorsche Parthenogenese bei dem Polychaeten *Grubsa pusilla*. Naturwissenschaften 42 1955 : 611-612.

Hauser, J. & Maurmanu, E. Studien über die Bewegungen des genus *Geoplana*. nat.) No. 3 1959 : 631-646 7 figs.

Helms, J. (1). Die Conodonten-Gattungen Polygnathus und Palmatolepis im höheren Oberdevon. Paläont, Z. 34: 12.

**Helms,** J. (2). Conodonten aus dem Saalfelder Oberdevon (Thüringen). Geologie **8** 1959 : 634–677 6 pls. figs.

Hempel, C. Über das Festsetzen der Larven und die Bohrtätigkeit der Jugendstadien von Polydora ciliata (Polychaeta Sedentaria). Helgoländ. wiss. Meeresunters. 7: 80-92 2 figs.

Herlant-Meewis, H. Evolution des caractères sexuels au cours de la croissance et de la réproduction chez *Eisenia foetida*. Ann. Soc. 2001. Belg. **89** 1958–59 [1960]: 281–336 14 figs. 4 pls.

Herlich, H. Age resistance of cattle to nematodes of the gastrointestinal tract. J. Parasit. 46: 392-397.

Hesling, J. J. Laboratory note. a. An alternative method of handling nematodes. b. A technique for transferring delicate specimens to mountant. c. Bubble "dissection" of immature Heterodera cysts. Nematologica 5: 322.

Hesling, J. J. & Wallace, H. R. Susceptibility of varieties of chrysanthemum to infestation by Aphilin-choides ritzema-bosi (Schwartz). Nematologica 5: 297-302 2 figs. 2 tables.

0

2

1

fa

N

fas

29

M

ein

Vo

Heyligers, P. C. Soil fauna of the osier beds of Brabantse Biesnosch, Arch. neerl. Zool. 13: 620-623.

Heyneman, D. On the origin of complex life cycles in the digenetic flukes. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 133–152 10 figs.

Heyneman, D. see Gambino, J. J.

Heynemann, D. see Voge, M.

Hendrix, J. C. see Shumard, R. F.

Hewitt, W. B. see Raski, D. J.

Hickman, J. L. Cestodes of some Tasmanian anura. Ann. Mag. nat. Hist. (13) 3: 1-23 9 figs.

Hickok, J. F. see Davenport, D.

Hidalgo-Escalante, E. see Flores-Barroeta, L.

Higgins, R. P. A new species of *Echinoderes* (Kinorhyncha) from Puget Sound. Trans. Amer. micr. Soc. 79: 85-91 1 fig.

Hilliard, D. K. Studies on the helminth fauna of Alaska. XXXVIII. The taxonomic significance of eggs and coracidia of some diphyllobothriid cestodes. J. Parasit. 46: 703-7161 pl. 3 figs.

Hoffman, G. L. Synopsis of Strigeoidea (Trematoda) of fishes and their life cycles. Fish. Bull. U.S. 60: 439-

Hoffmann, J. A propos d'une "maladie de captivité" des Cystobranches. Arch. Inst. Grand-Duc. Luxemb. N.S. 26 1959: 237-243 4 figs.

Hoffman, J. see Pawlowski, L. K.

Holden, M. J. & Green, J. The hydrology and plankton of the River Sokoto. J. Anim. Ecol. 29: 65-84 12 figs.

Holm-Hansen, O. see Nicholas, W. L.

Holt, P. C. The genus Ceratodrilus Hall (Branchiobdellae, Oligochaeta) with the description of a new species. Va J. Sci. n.s. 11: 53-77 4 pls.

Homez, J. see Diaz Ungria, C.

Hopper, B. E. Contributions to the knowledge of the genus Meloidodera (Nematoda: Tylenchida), with a description of M. charis n. sp. Canad. J. Zool. 38: 939-947 5 figs.

Howell, B. F. (1). Type species for the Nemertan worm genus, Legnodesmus. J. Paleont. 32 1958: 247.

Howell, B. F. (2). Three notes on Silurian worm genera. J. Paleont. 33 1959: 487.

Hrabă, S. Oligochaeta limicola from the collection of Dr. S. Husmann. Spisy Priř. Fak. Univ. Brne No. 415: 245-277 27 figs.

Hsien-chen, H. (1). Experimental transmission of Cysticercus cellulosae in Taiwan monkey, Macacus cyclopis (Swinhoe, 1862). Formosan Sci. 14: 66-80 2 pls.

Hsien-Chen, H. (2). Studies on the epidemiology of Fasciolopsis buski in South Taiwan. Formosan Sci. 14: 95-120 14 figs. 3 maps.

Hsü, H. F. & Li Hsü, S. Y. The infectivity of four geographic strains of *Schistosoma japonicum* in the rhesus monkey. J. Parasit. 46: 228.

Hsü, H. F., Li Hsü, S. Y. & Tsai, C. T. Further studies on the prepatent periods of four geographic strains of Schistosoma japonicum. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 153–160.

Hsü, H. F. see Li Hsü, S. Y.

Hsii, W.-n. Notes on some parasitic nematodes obtained from vertebrates in Nanking. Acta zool. sinica 12: 101-113 6 pls. [English summary].

Hubbard, E. D. see Zimmermann, W. J.

**Huckriede**, R. Die Conodonten der mediterranen Trias und ihr stratigraphisher Wert. Paläont. Z. **32** 1958: 141–175 5 pls.

Hunter, G. W., III (1). The use of anticoagulants and chlorobutanol for the recovery of adult schistosomes from mice. J. Parasit. 44: 206.

Hunter, G. W., III (2). Studies on schistosomiasis. XIII. Schistosome dermatitis in Colorado. J. Parasit. 46: 231-234.

Hunter, G. W., III & Birkenholz, D. E. Notes on larval trematodes from snails collected on Gunnison County, Colorado. J. Parasit. 46 5 Sect. 2: 36–37. [Abstract].

Hunter, G. W., III & Weinmann, C. J. Studies on schistosomiasis. XVI. Non-reciprocal acquired resistance between Schistosoma mansoni and Schistosomatium douthitti. J Parasit. 46 5: 34. [Abstract].

Hunter, W. S. & Vernberg, W. B. Preliminary studies on the life history of Cardiocephalus brandsis Szidat, 1928 (Trematoda: Strigeidae). J. Parasit. 46: 797-799 l fig.

Hunter, W. S. see Wells, M. J.

Hurková, J. A contribution to the knowledge of bat trematodes in Czechoslovakia. Acta Univ. carol. Praha. Biol. 1959 1959: 29-36 4 figs.

Husmann, S. Untersuchungen über die Sandlückenfauna der bremischen Langsamfilter. Abh. braunschw. wiss. Ges. 10 1958: 93–116 11 figs.

Hussey, K. L. see Cort, W. W.

Hutchinson, M. T. & Streu, H. T. Tardigrades attacking nematodes. Nematologica 5: 149 1 fig.

Hutton, R. F. & Sogandares-Bernal, F. (1). A list of parasites from marine and coastal animals of Florida. Trans. Amer. micr. Soc. 79: 287-292.

Hutton, R. F. & Sogandares-Bernal, F. (2). Studies on helminth parasites from the coast of Florida. II. Digenetic trematodes from the shore birds of the West coast of Florida. I. Bull. mar. Sci. Gulf & Caribbean 10: 40-54 2 figs.

Hutton, R. F. & Sogandares-Bernal, F. (3). Preliminary notes on the life-history of Mesostephanus appendiculatoides (Price, 1934) Lutz, 1935. Bull. mar. Sci. Gulf & Caribbean 10: 234–236 l fig.

Hutton, R. F. see Sogandares-Bernal, F.

Hwang, J. C. Effects of pH, various proteolytic enzymes, amino acids and other substances on the eggs and larvae of Ascaridia galli. J. Parasit. 46 5 Sect. 2:27. [Abstract].

Hwang, J. C. & Wehr, E. E. Occurrence of Capillaria obsignata Madsen, 1945, in peafowl, with a note on the systematic relationship to some other species of Capillaria in domestic birds. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 475–479 7 figs.

Hyman, L. H. (1). Second report on Hawaiian polyclads. Pacif. Sci. 14: 308-309.

Hyman, L. H. (2). New and unknown umagillid rhabdocoels from echinoderms. Amer. Mus. Novit. No. 1984: 1-14 13 figs.

Iksanov, K. I. On the intermediate hosts and the development of parasite worms in fishes of Issik-Kul. Izv. Akad. Nauk Kirgiz. S.S.R. (Biol.) 1 1959: 169-173. [In Russian].

Hes, C. The larval trematodes of certain fresh-water molluscs. II. Experimental studies on the life-cycle of two species of furcocercariae. Parasitology 50: 401-418 l pl.

Imajina, M. Description of a new polychaete, Nothria shirkiskinaiensis n. sp. of the family Eunicidae. Publ. Seto mar. biol. Lab. 8: 55-58 14 figs.

Inase, M. (1). On the double embryo of the aquatic worm *Tubifex hattai*. Sci. Rep. Tôhoku Univ. (4) Biol. 36: 59-84 16 figs.

Inase, M. (2). The culture solution of the eggs of Tubifex. Sci. Rep. Tôhoku Univ. (4) Biol. 36: 65-67.

Inatomi, S. Submicroscopic structure of the egg shell of helminth. II. A study on *Trichuris vulpis*. III. A study on *Capillaria hepatica*. Acta Med. Okayama 14: 257–264 2 pls.

Inglis, W. G. (1). Les nématodes de la famille des Maupasinidae. Ann. Parasit. hum. comp. 35: 190-191.

Inglis, W. G. (2). Further observations on the comparative anatomy of the head in the nematode family Subuluridae: with the description of a new species. Proc. zool. Soc. Lond. 135: 125-136 8 figs.

Inglis, W. G. & Chabaud, A.-G. Sur la position systématique des Schneidernematinae (Nematoda). Ann. Parasit. hum. comp. 35: 428–429 2 figs.

Inglis, W. G. & Diaz-Ungria, C. Una revisión del genéro Tropanoxyuris (Ascaridina: Oxyuridae). Mem. Soc. Cienc. nat. La Salle 19 54 1959: 176-212 38 figz. [English summary].

Inoue, I. Studies on the life history of Chordodes japonensis, a species of Gordiacea. II. On the manner of entry into the aquatic insect-larvae of Chordodes larvae. Annot. 2001. jap. 33: 132-141 7 figs.

Iordăcheschu, D. Observations à propos de quelques Nématodes parasites des oiseaux indigenes. Trav. Mus. Hist. nat. "Gr. Antipa" 1 19157 : 245-253 4 pls.

Isjumova, N. A. About formation of parasite fauna of fishes in Rybinsk Reservoir. Byull. Inst. Biol. Vodochr. No. 3 1959: 38-40. [In Russian].

Itagaki, H. The relation between the prevalence of fascioliasis and the distribution of the snail intermediate host of the life-fluke. Bull. biogeogr. Soc. Japan 20 1959: 29-32.

Ivleva, I. V. Respiration of the white Enchytraeid worm (*Enchytraeus albidus* Henle), Zool. Zh. 39: 165-175 6 figs. [English summary].

Iwata, F. The life history of the Nemertea. Bull. Mar. biol. Sta. Asamushi 10: 95-97 6 figs.

Izjumova, N. A. (1). Die Parasitenfauna der einsommerigen Wildkarpfen der Suskanbucht des Kujbyshev-Stausees. Byull. Inst. Biol. Vodochr. No. 3 1959: 36–37. [In Russian].

Izyumova, N. A. (2). Seasonal distribution of fish parasites in Rybinsk Reservoir. Trud. Inst. Biol. Vodochr. No. 3 (6): 283-300. [In Russian].

Jackson, G. J. Fluorescent antibody studies of Niphostrongylus muris infections. J. infect. Dis. 106: 20-36 28 figs.

Jacquet, J. Les hermelles dans la Baie du Mont Saint-Michel. Mem. Soc. nat. Sci. Cherbourg 46 1956 : 53-56 1 fig.

Jain, G. P. (1). On the genus Artyfeckinostomum (Lane, 1915) (Echinostomatidae: Trematoda). Parasitology 50: 1-5.

Jain, G. P. (2). Further observations on Artyfeckinostomum mehrai (Faruqui) (Echinostomatidae: Trematoda). Parasitology 50: 7-11 6 figs.

Jain, S. L. Monogena [sic] of Indian freshwater fishes. XII. New dactylogyrid trematodes from the gill filaments of Cyprinidae and Gobiidae hosts. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 161–171 19 figs.

Jaiswal, G. P. & Vasudev, T. Studies on the avian trematodes, belonging to the genus Eumegacetes Loos [sic] 1900. Z. Parasit. 20: 175–190 5 figs.

James, H. A. see Cheng, T. C.

Janiszewska, J. Studies on larval nematodes parasitic in Tubificidae. (A hypothesis on the life-cycle of Rhabdochonidae). Acta Parasit. polon. 8: 419-425 l fig.

Jarecka, L. (1). Life-cycles of tapeworms from lakes Goldapiwo and Mamry Pólnocne. Acta Parasit. polon. 8: 47-66 7 pls.

Jarecka, L. (2). Separation of sexes and quantitative regulation in cestodes of the genus *Diploposthe* Jacobi, 1896 (Cestoda-Diplopostidae). Bull. Acad. polon. Sci. Cl. Sci. biol. 8: 155–157.

Jarrett, W. F. H., Jennings, F. W., McIntyre, W. I. M., Mulligan, W & Urquhart, G. M. Immunological studies on Dictyocaulus viviparus infection. Immunity produced by the administration of irradiated larvae. Immunology 3: 145–151 6 figs.

Jarrett, W. F. H., Jennings, F. W., McIntyre, W. I. M., Mulligan, W. & Urquhart, G. M. Immunological studies on *Dictyocaulus viviparus* infection. Active immunization with whole worm vaccine. Immunology 3: 135-1445 figs.

Jarry, D. (1). Notes biologiques sur les Hirudinées I. Les fluctuations dans l'espèce Espobdella octoculata (L.). Bull. Soc. zool. Fr. 84 1959 [1960]: 371-380 4 figs.

Jarry, D. (2). Notes sur les Hirudinées (suite). II. Sur la presence d'*Hirudo michaelseni* Augener 1936 au Borkou. Bull. Soc. zool. Fr. 84 1959 [1960]: 380-382 1 fiz.

Jarry, D. (3). Notes sur les Hirudinées (suite). III. A propos de Pontobdelles récoltées sur Raja batis L. à Sète. Bull. Soc. zool. Fr. 84 1959 [1960]: 382-384 1 fig.

Jarry, D. (4). Une curieuse coaction de parasitism: l'association entre Glossiphonia complanata et Erpobdella octoculata. Terre et la Vie 107: 51-55 l fig.

Jarry, D. (5). Piscicola haranti n. sp. (Hirudinea). Ann. Parasit. hum. comp. 35: 305-315 4 figs.

Jaskoski, B. J. Amino acids in Ascaris suum eggs. J. Parasit. 46 5 Sect. 2: 27. [Abstract].

Jenkins, W. R. Paratylenchus marylandicus, n. sp. (Nematoda: Criconematidae) associated with roots of pine. Nematologica 5: 175-177 1 fig.

Jenkins, W. R. see Davis, R. A.

Jennings, F. W. see Jarrett, W. F. H.

Jennings, T. V. Faunal zonation of the Minnelusa Formation, Black Hills, South Dakota. J. Paleont. 33 1959: 986-1000 1 pl. figs.

Jensen, B. Loegeiglus (*Hirudo medicinalis* L.) forekomst i Danmark. Flora og Fauna 66: 25-32 1 fig. [English summary].

Johri, G. H. (1). A new paruterinid cestode, Lallum magniparuterina gen. et sp. nov. from the intestine of a common teal, Nettion crecca Linn. Parasitology 50: 269-272 4 figs.

Johri, G. N. (2). Studies on some cestode parasites. V. Two new species of cestodes belonging to the family Hymenolepididae Fuhrmann, 1907. J. Parasit. 46: 251-252 2 pls.

Jollès, P. & Zuili, S. Purification et étude comparée de nouveaux lysozymes; extraits du poumon de poule et de Nephthys hombergi. Biochem. & Biophys. Acta 39: 212-217 4 figs.

Jones, A. W., Segarra, J. M. & Wyant, K. D. Growth and hatching of taeniid eggs. J. Parasit. 46: 170-174 1 fig.

Jones, F. G. W. Plant parasitic nematodes. Adv. Sci. 17: 174-180 7 figs.

Jordan, P. Bancroftian filariasis in Tanganyika: observations on elephantiasis, microfilarial density, genital filariasis and microfilaraemia rates. Ann. trop. Med. Parasit. 54: 132–140 4 figs.

Jordano, D. & Diaz-Ungria, C. Craspedocotyla margaritensis nov. gen. nov. sp. (Cestoda: Hymenolepididae) nueva tenia parásita del turpial (Icterus icterus) (Aves: Passeres). Mem. Soc. Cienc. nat. La Salle 20: 198-210 8 figs. [English summary].

Jorge da Silva, A. A. see Teixeira de Freitas, J. F.

Joyne, J. W. Earthworms of the Upper Whitewater Vallet (East Central Indiana). Proc. Ind. Acad. Sci. 69: 313-319.

Judd, W. W. Observations on the habitat, food, reproduction state and intestinal parasites of the smooth green snake at London, Ontario. Canad. Fld. Nat. 74: 100-106.

Juget, J. Recherches sur la faune aquatique de deux grottes du Jura méridional français: La grotte de la Balme (Isère) et la grotte de Corveissiat (Ain). Ann. Spéléol. 14 3-4 1959: 391-401 4 figs.

Kadziolka, A. Histopathological studies on the tissue test in experimental ascaridiosis of chickens. Acta Parasit. polon. 8: 315-334 3 pls.

Kagan, I. G. Studies on the standardization of the intradermal test for bilharziasis. J. Parasit. 46 5 Sect. 2: 34. [Abstract].

Kagan, I. G. see Levine, D. M.

Kämpfe, I.. (1). Über Möglichkeiten der "Physiologischökologischen" Arbeitsweise in der Nematodenforschung. Verh. dtsch. zool. Ges. 1959 [1960]: 378–386 6 figs.

Kämpfe, L. (2). Die räumliche Verteilung des Primärbefalls von *Heterodera schachtii* Schmidt in den Wirtswurzeln. Nematologica 5: 18-26 4 figs.

Kämpfe, L. (3). Uber den Wert von Schwanzform und Körpermassen für die Artdiagnose der Nematoden (dargestellt an der Gattung Heterodera Schm.). Nematologica Suppl. II: 112–122 6 figs. Kanatani, H. (1). Studies on the formation of bipolar heads in the planarian, Dugesia gonocephala. II. Suppression of bipolar-head formation by potassium cyanide and anaerobis. J. Fac. Sci. Univ. Tokyo (Zool.) 9: 49-58 3 figs.

Kanatani, H. (2). Studies on fission in the planarian, Dugesia genocephala. II. Effects of colchicine and demecolcine on the occurrence of fission. J. Fac. Sci. Univ. Tokyo (Zool.) 9: 59-66 l fig.

Kang, H. V. see Hahn, S. S.

Kannan, S. Soil nematodes from Madras City. J. zool. Soc. India 12: 40-50 10 figs.

Karmanova, E. M. (1). The life cycle of the nematode *Dioctophyme renale* (Goeze, 1782). Dokl. Akad. Nauk. S.S.S.R. (Transl.), Biol. Sci. 127 1959: 700-701.

Karmanova, E. M. (2). The life cycle of the nematode Dioctophyme renals (Goeze, 1782), a parasite in the kidneys of carnivora and of man. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 132: 456-457. (Dokl. Akad. Nauk S.S.S.R. 132: 1219-1220). [In Russian].

Karppinen, E. Ein Regenwurm mit doppeltem Hinterende. Arch. Soc. zool. bot. fenn. Vanamo 14 1959: 68-69 2 figs.

Kassai, T. (1). Die Synonomie des Cystocaulus ocreatus. Acta vet. hung. 7 1957: 157-163.

Kassai, T. (2). Über de geographischen Verbreitung der Protostrongylidose der Schafe. Acta Vet. hung. 7 1957: 165-173 1 fig.

Kassai, T. (3). Larvae of protostrongylins in snails. Acta vet. hung. 8 1958: 223-236 7 figs.

Kassai, T. (4). Studies on the morphology of the adult Cystocaulus ocreatus and its preinfective larvae. Acta vet. hung. 8 1958: 349-373 19 figs.

Kates, K. C. & Turner, J. H. An experiment on the combined pathogenic effects of *Haemonchus contortus* and *Nematodirus spathiger* on lambs. Proc. helminth. Soc. Wash. 27: 62-67.

Kates, K. C., Turner, J. H., Lindahl, I., Whitmore, G. E. & Enzie, F. D. Effectiveness of three management systems on parasitism in lambs. I. Clinical effects of parasitisms relative to exposure and medication. J. Parasit. 46 5 Sect. 2: 40. [Abstract].

Kates, K. C. see Turner, J. H.

Katto, J. Some problematica from the so-called unknown Mesozoic strata of the southern part of Shikoku, Japan. Sci. Rep. Tôhoku Univ. Geol. Spec. 4: 323-334 2 pls.

Katz, F. F. The effect of irradiation on reproduction by the heterogenetic generation of Strongyloides papillosus. I. Irradiation of males and females. J. Parasit. 46: 383-391 1 fig.

Kawakatsu, M. Notes on the freshwater planarians found in the subterranean waters of the Akiyoshi district. Jap. J. Zool. 12: 609-620 2 figs.

Kazlauskas, J. On the effect of phenothiazine on the development of *Strongyliata* larvae in the external surroundings. Acta parasit. lithuan. 2 1959 [1960]: 17-18.

Keeling, J. E. D. The effects of ultra-violet radiation on Nippostrongylus muris. I. Irradiation of infective larvae: lethal and sublethal effects. Ann. trop. Med. Parasit. 54: 182-191 2 figs.

**Kegel,** W. Sôbre vermes recentes e fósseis. Notas Serv. geol. Brasil **100** 1957 : 1-11 2 pls.

Kelley, G. W. see Olsen, L. S.

Kelley, G. W., Jr. see Sen, H. G.

Kent, H. N. Isolation of specific antigens from Ascaris lumbricoides. J. Parasit. 46 5 Sect. 2: 23.

Kerneis, A. Contribution a l'étude faunistique et écologique des herbiers de Posidonies de la région de Banyuls. Vie et Milieu 11: 145-187 14 figs.

Kershaw, W. E. see Phillipson, R. F.

Kershaw, W. E. see Ramachandran, C. P.

Kershaw, W. E. see Stretch, R. G. A.

Kewalramani, H. G., Wagh, P. V. & Ranade, M.R. Taxonomy of the lugworm found off Bombay. J. zool. Soc. India 11 1959 [1960]: 109-115 1 fig.

Khalil, H. M. see Nagaty, H. F.

Khalil, L. F. (1). On a new genus, Sandonella, for Proteocephalus sandoni Lynsdale, 1960 (Proteocephalidae) and the erection of a new subfamily, Sandonellinae. J. Helminth. 34: 47-54 8 figs.

Khalil, L. F. (2). On a new nematode, Nilonema gymnarchi gen. et sp. nov. (Dracunculidae), from a freshwater fish in the Sudan. J. Helminth. 34: 55-58 7 figs.

Khan, D. (1). Studies on larval trematodes infecting freshwater snails in London (U.K.) and some adjoining areas. Part I. Echinostome cercariae. J. Helminth. 34: 277-304 21 figs.

Khan, D. (2). Studies on larval trematodes infecting freshwater snails in London (U.K.) and some adjoining areas. Part II. Gymnocephalous cercariae. J. Helminth. 34: 305-318 14 figs.

Kjan, M. A. (1). Descriptions of two nematodes, Ektaphelenchus macrostylus n. sp., and Laimaphelenchus ulmin. sp., with a key to species of Laimaphelenchus. Canad. J. Zool. 38: 91-97 11 figs.

Khan, M. A. (2). Stictylus hastatus (Khan, 1957) n. comb., and Stictylus ungulacaudus (Khan, 1957) n. comb. (Nematoda: Neotylenchidae). Canad. J. Zool. 28: 225-226.

[Khlebovich, V. V. ] (1). [Polychaete worms from the littoral of the Kuril Islands]. Akad. Nauk U.S.S.R. Zool. Inst. Thesis Leningr. 1959: pp. 1-20.

[Khlebovich, V. V.] (2). [New case of rapacity in Polychaeta]. Priroda 9 1959: 118. [In Russian].

Kido, T. & Kishida, Y. Effect of thiourea and iodine on the depigmentation of planarian eye. Annot. zool. jap. 33: 24-32 6 figs.

King, R. E. see Noble, E. R.

Kinnamon, K. E. see Rothstein, N.

Kirk, D. E. see Goodchild, C. G.

Kiseleva, M. I. (1) [Distribution of the polychaet-larvae in plankton of Black Sea]. Trav. Sta. biol. Sebastopol. 12 1959: 160-167 7 figs. [In Russian].

Kiseleva, M. I. (2). [Influence of Aral and Black Sea brackish waters on Nereis succinea]. Trav. Sta. biol. Sebastopol. 13: 114-118 2 figs. [In Russian].

Kishida, Y. (1). Depigmentation of the planarian eye in a solution of thiourea containing an oxidising agent. Zool. Mag., Tokyo 69: 190-194. [English

Kishida, Y. (2). Depigmentation of the planarian eye treated with salts of dithiocarbamide. Zool. Mag., Tokyo 69: 332-335. [English summary].

Kishida, Y. see Kido, T.

Kisielewska, K. (1). Life cycle of the tapeworm Pseudodiorchis prolifer (Villot, 1890) comb. nov. (= Pseudodiorchis multispinosa Zarnowski, 1955). Acta Parasit. polon. 8: 197-204 2 figs.

Kisielewska, K. K. (2). The life cycle of Soricinia diaphana (Cholodkovsky, 1906) Zarnowski, 1955 (Hymenolepididae). Bull. Acad. polon. Sci. Sér. Sci. biol. 8: 219-222 5 figs.

**Kitamori**, R. (1). Two new species of Cirratulid and Nephthydidae (Annelida: Polychaeta). Bull. jap. Soc. Sci. Fish. **26**: 1082–1085 2 figs.

Kitamori, R. (2). Description of two new species of Pilargiidae (Annelida: Polychaeta) from the Seto-Inland-Sea. Bull. jap. Soc. Sci. Fish. 26: 1086-1090

Klapper, G. An Upper Devonian conodont fauna from the Darby formation of the Wind River Mountains, Wyoming. J. Paleont. 32 1958: 1082-1093 2 pls.

Kleijburg, P. Soil sample examination as a basis for advisory work against stem eelworms Ditylenchus dipsaci (Kühn). Nematologica Suppl. II: 22-27 2 figs.

Klement, V. Zur Rotatorienfauna ephemerer ewässer. Jh. Ver. vaterl. Naturk. Württemb. 115: Gewässer. 338-349 16 figs.

Kloss, G. R. see Travassos, L.

Klots, A. B. A terrestrial flatworm well established outdoors in the northeastern United States. Syst. Zool. 9: 33-34.

Knox, G. A. The polychaetous annelids of New Zealand. Part I. Glyceridae. Rec. Canterbury (N.Z.) Mus. 7: 219-232 27 figs.

Kobulej, T. Über die parasitische Phase der post-embryonalen Entwicklung von Amidostomum anseris (Zeder, 1800). Acta vet. hung. 9 1959: 243–260 10

Kockel, F. Conodonten aus dem Paläozoikum von Málaga (Śpanien). Neues Jb. Geol. Paläont. B 1958: 255-262 fig.

Kol, E. & Varga, L. Beiträge zur Kenntnis der Mikroflora und Mikrofauna in den Donauarmen neben Baja (Südungam). Acta Biol. Acad. Sci. hung. 11: 187-217 21 figs. [English, Russian summaries].

Kolesnikova, M. N. Parasites of economic fishes of the Lakes Kara-Rim in the Kzil-Ordin Province. Trud. Inst. Zool. Alma-Ata 14: 128-129. [In Russian].

Kollmannsperger, F. Terricole Oligochaeten in der Gebirgswüste des Ennedi im Nord Tschadgebiet, eine tiergeographische Untersuchung. zool. Ges. 1959 [1960]: 374-377 2 figs. Verh. dtsch.

Kolmayer, S. & Stéphan-Dubois, F. Néoblastes et limitation du pouvoir de régénération céphalique chez la planaire Dendroccelum lacteum. J. Embryol. exp. Morph. 8: 376-386 6 figs. 2 pls.

Kolmayer, S. see Stephan-Dubois, F.

Kopaev, Y. N. see Spasskaya, L. P.

Korathra, K. J. (1). Studies on host-specificity and host-parasite zoogeography and phylogeny. II. Monogenetic trematodes and amphibian hosts. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 173-196.

Koratha, K. J. (2). Preliminary report on the monogenetic trematodes of marine fishes of the eastern Indo-Pacific. J. Parasit. 46 5 Sect. 2: 13-14. [Abstract].

Koratha, K. J. (3). Preliminary report on the parasites of a chimaerid fish *Hydrolagus collei* (Lay and Bennett) from the eastern Indo-Pacific with comments on the phylogenetic significance of parasitic distribution in Holocephali. J. Parasit. 46 5 Sect. 2: 14. [Abstract].

Koratha, K. J. & Martin, W. E. Preliminary report on the life history of monogenetic trematodes with observations on the survival of adults outside the host. J. Parasit. 46 5 Sect. 2: 14-15. [Abstract].

Korn, H. (1). Zur Dauer der Metamorphose von Echiurus abyssalis Skor (Echiurida, Annelida). Kieler Meeresforsch. 16: 238-242 5 figs.

Korn, H. (2). Ergänzende Beobachtungen zur Struktur der Larve von *Echiurus abyssalis* Skor. Z. wiss. Zool. **164**: 199-237 35 figs.

Korn, H. (3). Das larvale Nervensystem von Pectinaria Lamarck und Nephthys Cuvier (Annelida, Polychaeta). Zool. Jb. (Anat.) 78: 427-456 35 figs.

**Korotkevitsch**, V. S. A new genus of pelagic nemerteans from the Antarctic. Zool. Zh. **39**: 838-841 3 figs. [English summary].

Korpaczewska, W. Some reflections on Hymenolepis funcifera Krabbe 1869 and related species. Acta Parasit. polon. 8: 461-470 3 figs.

Kosicki, S. The vertical distribution of pelagic Rotatoria during the summer stagnation in lakes Mikolajki and Sniardwy. Polsk. Arch. Hydrobiol. 8: 9-61 24 figs. [English, etc., summaries].

Kotel'Hikov, G. A. Life cycle of the cestode, Fimbriaria amurensis sp. n., parasite of domestic ducks. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 130: 133-134 l fig. [Dokl. Akad. Nauk S.S.S.R. 130: 944-945 l fig.].

Kováts, L. Planaria alpina (Dana) in the valley of the Sicas. Natura, Bucuresti 12: 94-96 2 figs.

Kozicka, J. Metacercaria Neodiplostomum pseudattenuatum (Dubois, 1928) Dubois, 1932, syn. Neodiplostomulum seardinii Schulman (in Dubinin 1952). Acta Parasit. polon. 8: 369–377 9 figs.

Kozicka, J. & Niewiadomska, K. (1). Tylodelphys podicipina sp. n. (Trematoda, Strigeidae) and its lifecycle. Acta Parasit. polon. 8: 25-36 13 figs.

Kozicka, J. & Niewiadomska, K. (2). Studies on the biology and taxonomy of trematodes of the genus Tylodelphys Diesing, 1850 (Diplostomatidae). Acta Parasit. polon. 8: 379-401 6 figs.

Kozlowska, J. On the nematodes of amphibians of Poland, mainly from the environment of Lodz. Acta Parasit. polon. 8: 215-230 1 fig.

**Kradel,** J. Mehrjährige Untersuchungen zum Wirtspflanzenkreis einer Herkunft des Stock- und Stengelälchens (*Ditylenchus dipsaci*). Nematologica Suppl. II: 40–48 3 figs.

**Krall**, E. Hemicycliophora typica De Man, 1921 (Nematoda, Criconematidae) first recorded in fresh waters. Loodus. Selts. Tallinn **51** 1959: 199–201 1 fig. [English summary].

Kreis, H. A. (1). Parasitische Würmer aus südamerikanischen Haustieren (Beiträge zur Kenntnis parasitischer Nematoden. XXII). Z. Parasit. 20: 23-134 34 figs.

Kreis, H. A. (2). Beiträge zur Kenntnis parasitischer Nematoden. XXI. Ein neuer parasitischer Nematode aus dem Klippschliefer *Procavia capensis* Pallas (Ungulata; Hyracoidea): Acanthostephanocephalus caballeroi n. g., n. sp. (Oxyuroidea; Atractidae; Crossocephalinae). in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 481-486 figs.

Krotas, R. (1). Über die Beziehungen zwischen Myxidium lieberkühni Bütschli, 1882 und Phyllodistomum folium (Olfers, 1816). Acta parasit. lithuan. 2 1959 [1960]: 13–16.

Krotas, R. (2). Karpinin Zuvu parazitas Cucullanus dogieli sp. nov. Trud. Akad. Nauk Litovsk. S.S.R. (B) 2 1959: 173-176 4 figs.

Krotov, A. I. Zoogeographical analysis and hypotheses on the origin of the helminthofauna of vertebrates on the Sakhalin. Zool. Zh. 39: 481-489, [English summary].

Krüger, F. Zur Wirkungsweise des Hämoglobins. Versuche an Arenicola. Verh. dtsch. zool. Ges. 1959 [1960]: 348-351 1 fig.

Kruidenier, F. J. (1). Observations on the ultrastructure and histochemistry of cercarial glands. J. Parasit. 46 5 Sect. 2: 19. [Abstract].

Kruidenier, F. J. (2). The accessory piece in the differentiation of certain oxyurids of the genus Syphacia Seurat, 1916. J. Parasit. 46 5 Sect. 2: 19-20. [Abstract].

Kruidenier, F. J. (3). Ultrastructure in the tails of furcocercous cercariae. J. Parasit. 46 5 Sect. 2: 32. [Abstract].

Kubiček, F. Beitrag zur Kenntnis des Zooplanktons der Frainer Talsperre (Südmähren). Spisy Přírod. Fak. Univ. Brné 12 1959 : 419-436 map. [German, etc., summaries].

Kühn, O. Triasfossilien aus den Julischen Alpen. Razpr. Akad. Ljubljana (4) 4 1958: 441-450 3 figs.

Kuiper, K. Resistance of white clover varieties to the clover cyst-eelworm, *Heterodera trifolii* Goffart. Nematologica Suppl. II: pp. 95-96.

Kulakova, A. P. see Dubinina, M. N.

Kulakovskaya, O. P. Development stages of the cestode Bathybothrium rectangulum recovered from the barbel at different times of the year. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 127 1959: 691-693 4 figs.

**Kümmel,** G. Die Feinstruktur des Pigmentbecherocells bei Miracidien von Fasciola hepatica L. Zool. Beitr., N.F. 5: 345-354 9 figs.

Kuntz, R. E. see Coil, W. H.

Kuntz, R. E. see Myers, B. J.

Kuntz, R. E. see Schad, G. A.

Kurašvili, B. K faune parazitičeskich červej ryb Černogo morja. Česk. Parasit. 7: 251-261.

Kurohagi, T. (1). Studies on the annual succession of the plankton organisms in Lake Shikotsu, Hokkaido. (I) Quantitative succession of the plankton organisms at an offshore station of Lake Shikotsu, May 1952–June 1957. Sci. Rep. Hokkaido Salm. Hatch. no. 12 1958: 97-110 5 figs. 1 pl. [English summary].

Kurohagi, T. (2). On the plankton of Lake Chimikeppu-ko in eastern Hokkaido. Sci. Rep. Hokkaido Salm. Hatch. No. 14 1959: 193–210 3 figs. 7 pls. [English summary].

Kurohagi, T. & Sasaki, S. Seasonal changes of vertical distribution of zooplankton in Lake Shikotsu, Hokkaido. Sci. Rep. Hokkaido Salm. Hatch. No. 13 1959: 51-55 9 figs. [English summary]. Kutikova, L. A. see Butorina, L. G.

Ladd, H. S. (Editor). Treatise on marine ecology and paleoecology. Mem. geol. Soc. Amer. 67 1957: 1-1077 figs.

Ladygina, N. M. Influence of the temperature on the intensity of respiration of some phytohelminthes. Dokl. Akad. Nauk Ukr. S.S.R. No. 2: 228-231. [English summary].

Lal, M. B. & Shrivastava, S. C. Some histochemical observations on the cuticle of Fasciola indica Varma, 1953. Experientia 16: 185-186.

Lagrange, E. Infections unisexuées et possibilité de guérison de bilharziose à S. mansoni chez la souris. Riv. Parassit. 19 1958: 59-66. [English summary].

Laing, A. B. G., Edeson, J. F. B. & Wharton, R. H. Studies on filariasis in Malaya: the vertebrate hosts of *Brugia malayi* and *B. pahangi*. Ann. trop. Med. Parasit. 54: 92-99 2 pls.

Lall, B. S. & Ansari, M. N. A. Field studies on the root-knot nematodes (*Meloidogyne* spp.) Nematoda Heteroderidae. Sci. & Cult. 26: 279-281 l fig.

Lamont, A. & Lindström, M. Arenigian and Llandeilian Charts identified in the Southern Uplands of Scotland by means of Conodonts, etc. Trans. Edinb. geol. Soc. 17 1957: 60-70 l pl. figs.

Larne, R. Contribution à la connaissance limnologique du Lac d'Aydat. Rev. Sci. nat. Auvergne N.S. 24: 3-49 4 figs.

Laubier, L. (1). Une nouvelle sous-espèce de Syllidien: Haplosyllis depressa Augener sap. nov. Chamaeleon, ectoparasite sur l'octocoralliaire Muriesa chamaeleon Von Koch. Vie et Milieu 11: 75-87 2 figs.

Laubier, L. (2). Présence a Banyuls de Vermiliopsis richardi Fauvel, polychète Serpulidae. Vie et Milieu 11: 319-320.

Laubier, L. (3). Diplocirrus glaucus (Malmgren), Chloraemidae nouveau en Méditerranée. Vie et Milieu 11: 507-508.

Laugier, R. see Gardet, G.

Lavrov, L. I. On fauna and dynamics of cestodes, parasites of the intestine of cattle in Northern Kazakhstan. Trud. Inst. Zool. Alma-Ata 12: 150-165 11 figs. [In Russian].

Lawson, J. D. The succession of shelly faunas in the British Ludlovian. Rep. 21st Internat. Geol. Cong. 7: 114-125.

Layne, J. N., Birkenholz, D. E. & Griffo, J. V., Jr. Record of *Dracunculus insignis* (Leidy, 1858) from raccoons in Florida. J. Parasit. 46: 685.

Le Berre, J. R. & Ritter, M. Etude histologique de nématocécidies en microscopie de fluorescence. Nematologica Suppl. II: 144-148 2 figs.

Lebied, B. Mise au point à propos d'une nouvelle méthode de dissection des vecteurs des filarioses. Le but de cette méthode. Riv. Parassit. 21: 71-79 4 figs.

Lecuona, M. de O. (1). A oncocercose e o seu interesse médico-social na Guiné Portuguesa. Bol. cult. Guiné Portug. 15: 193-237 10 pls.

Lecuona, M. de O. (2). Primeiros dados sobre a distribuição da oncocercose na Guiné Portuguesa. An. Inst. Med. trop. Lisboa 16 1959: 199-208 1 map 2 pls. [English and French summaries].

Lee, D. L. (1). The distribution of glycogen and fat in Thelastoma bulhossi (Magalhães, 1900), a nematode parasitic in cockroaches. Parasitology 50: 247-259 24 figs.

Lee, D. L. (2). The effect of changes in the osmotic pressure upon Hammerschmidtiella diesingi (Hammerschmidt, 1838) with reference to the survival of the nematode during moulting of the cockroach. Parasitology 50: 241-246 4 figs.

Lee, H.-F. (1). Effects of superinfection on the behavior of *Toxocara canis* larvae in mice. J. Parasit. 46: 583-588.

Lee, H. F. (2). The life-history of Heterobilharzia americana. J. Parasit. 46 5 Sect. 2: 34. [Abstract].

Lee, H. F. see Malek, E. A.

Le Flore, W. B. The in vitro action of normal and immune vertebrate sera on cercariae naturally infecting Cerithidea californica. J. Parasit. 46 5 Sect. 2: 31-32. [Abstract].

Legendre, R. Sur la présence de cellules neurosécrétrices dans les ganglions sous-oesophagiens de la sangsue médicinale (*Hirudo medicinalis* L.) suivie de quelques considérations sur la neurosécrétion. Bull. biol. 93: 462-471 3 figs.

Lehmann, D. I. Some parasites of central California amphibians. J. Parasit. 46: 10.

Leigh, W. H. The Florida spotted gar, as the intermediate host for Odhneriotrema incommodum (Leidy, 1856) from Alligator mississippiensis. J. Parasit. 46 5 Sect. 2: 16. [Anstract].

Leigh, W. H. see Lenhoff, H. M.

Leim, A. H. see Bousfield, E. L.

Le Moigne, A. sée Lender, T.

Lender, T. L'inhibition spécifique de la différenciation du cerveau des planaires d'eau douce en régénération. J. Embryol. exp. Morph. 8: 291-301 1 pl.

Lender, T. & Gabriel, A. Étude histochimique des néoblastes de Dugesia lugubris (Turbellarie Triclade) avant et pendant la régénération. Bull. Soc. zool. Fr. 85: 100-110 9 figs.

Lender, T. & Le Moigne, A. Les organes musculoglandulaires de *Polycelis tenuis* Jijima (Turbellarie Triclade). Bull. Soc. zool. Fr. 85: 90–99 8 figs.

Lenhoff, H. M., Schroeder, R. & Leigh, W. H. The collagen-like nature of metacercarial cysts of a new species of *Ascocotyle*. J. Parasit. 46 5 Sect. 2: 36. [Abstract].

Lentati, G. B. Processi maturativi ed evoluzione dello spermio in ovociti sinaptici ed asinaptici di planarie. Atti Soc. tosc. Sci. nat. 66B: 60-80 2 pls. 14 figs.

Lesli-Massari, A. see Pasquini, P.

Lessertisseur, J. see Gardet, G.

Le Van Hoa (1). Redescription de quelques Capillaria peu connus, récoltés le Richelieu (Indre-et-Loire). Ann. Parasit. hum. comp. 35: 594-606 4 figs.

Le Van-Hoa (2). Synonymie des genres Amplicaecum Baylis 1920 et Ormoascaris Skrjabin 1916, Ann. Parasit, hum. comp. 35: 760–761.

Levine, D. M. & Kagan, I. G. Studies on the immunology of schistosomiasis by vaccination and passive transfer. J. Parasit. 46: 787-792.

Levine, N. D., Schaeffler, W. F. & Szanto, J. The effect of early weaning on acquisition of gastro-intestinal nematodes by lambs. J. Parasit. 46 5 Sect. 2: 41-42. [Abstract].

Lewert, R. M. & Dusanic, D. G. The effect of a diamino-dibenzyl-alkane on the histochemical reaction for alkaline phosphatase in adult Schistosoma mansoni.

J. Parasit. 46 5 Sect. 2: 32. [Abstract].

Lewert, R. M. & Mandlowitz, S. Studies on innate immunity to Schistosoma mansoni. J. Parasit. 46 5 Sect. 2: 32. [Abstract].

Lewert, R. M. see Mandlowitz, S.

Leytham, G. W. H. see Stretch, R. G. A.

Li Hsü, S. Y. & Hsü, H. F. (1). New approach to immunization against Schistosoma japonicum. Science 133: 766.

Li Hsü, S. Y. & Hsü, H. F. (2). Infectivity of the Philippine strain of Schistosoma japonicum in Oncomelania hupensis, O. formosana and O. nosophora. J. Parasit. 46: 793-796.

Li Hsü, S. Y. see Hsü, H. F.

Lillis, W. G. see Burrows, R. B.

Lindahl, I. see Kates, K. C.

Lindahl, I. see Turner, J. H.

**Lindström,** M. (1). Two Ordovician Conodont Faunas found with Zonal Graptolites. Geol. Fören. Stockh. Förh. **79** 1957: 161-178 2 pls. figs.

Lindström, M. (2). A Lower-Middle Ordovician succession of conodont faunas. Rep. 21st Internat. geol. Cong. 7: 88-96 figs.

Lindström, M. see Lamont, A.

Ling, M. T. & Chow, S. C. A new species of Ostertagia (Nematoda: Trichostrongylidae) from the sheep of Chekiang. Acta zool. sinica 12: 114-118 8 figs. [English summary].

Little, M. D. see Malek, E. A.

Llewellyn, J. Amphibdellid (monogenean) parasites of electric rays (Torpedinidae). J. mar. biol. Ass. U.K. 39: 561-589 3 pls. 28 figs.

Llewellyn, J. & Owen, I. L. The attachment of the monogenean Discocotyle sagittata Leuckart to the gills of Salmo trutta L. Parasitology 50: 51-60 4 figs. 1 pl.

Llewellyn, L. M. see Bruce, J. I.

Logachev, E. D. (1). On the trophic function of the intestinal epithelium of trematodes. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 131: 282-284 2 figs. [Dokl. Akad. Nauk S.S.S.R. 131: 709-712].

Logachev, E. D. (2). On the tissue-nature of epithelium in Cestodes. Trud. Inst. Zool. Alma-Ata 12: 137-139. [In Russian].

Logachev, E. D. & Bruskin, R. B. (1). On the question of the trematode's asexual reproduction. Acta parasit. lithuan. 2 1959 [1960]: 97-99 3 figs.

Logachev, E. D. & Bruskin, B. R. (2). The histological changes occurring in the intestine of ducks as a result of invasion by the acanthocephalan Polymorphus magnus Skrjabin 1913. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 129 1959: 1052-1054 4 figs. [Dokl. Akad. Nauk S.S.S.R. 129 1959: 709-710 1 pl.]

Loof, P. A. A. Nomenclatorial note upon some Pratylenchus species. Nematologica 5: 322-323.

Loos, C. A. & Loos, S. B. The black-head disease of bananas (Musa acuminata). Proc. helminth. Soc. Wash. 27: 189–193 8 figs.

Lordello, L. G. E. & Zamith, A. P. L. Meloidogyne coffeicola sp. n., a pest of coffee trees in the state of Paraná, Brazil (Nematoda, Heteroderidae). Rev. bras. Biol. 20: 375-379 10 figs.

Lorenzo, A. S. see Stransky, E.

Louch, C. D. Resistance to Trichinella spiralis following infection by Nippostrongylus muris. J. Parasit. 46 5 Sect. 2: 23. [Abstract].

Lubinsky, G. (1). The maintenance of Echinococcus multilocularis sibiricensis without the definitive host. Canad. J. Zool. 38: 149-151.

Lubinsky, G. (2). The variability of the number of rostellar hooks in two species of *Echinococcus* from North America. Canad. J. Zool. 38: 605-612 4 figs.

Lubinsky, G. (3). A vegetatively propagated strain of larval *Echinococcus multilocularis*. Canad. J. Zool. 38: 1117-1125 15 figs.

Lubyanov, I. P. Some materials dealing with the bottom fauna composition of the Molotschny estuary and the Pre-Azov area. Byull. mosk. Obshch. Isp. Prir. Biol. N.S. 65: 55–60. [English summary].

Luc, M. (1). Dolichodorus profundus n. sp. (Nematoda-Tylenchida). Nematologica 5: 1-6 l pl.

Luc, M. (2). Trois nouvelles espèces du genre Rotylenchoides Whitehead, 1958 (Nematoda-Tylenchida). Nematologica 5: 7-17 3 figs.

Lucker, J. T. A test of the resistance of Tamia saginata eggs to freezing. J. Parasit. 46: 304.

Lucker, J. T. & Douvres, F. W. Survival of Tamia saginata eggs on stored hay. Proc. helminth. Soc. Wash. 27: 110-111.

Lucker, J. T. & Vegors, H. H. Immunization against the cattle lungworm: an experiment on the use of larvae attenuated by exposure to X-rays. J. Parasit. 46 5 Sect. 2: 39. [Abstract].

Lucker, J. T. see Goldberg, A.

Luferov, V. P. Occurrence of Acanthocephalus lucii (Müller) in the bottom fauna of Rybinsk Reservoir. Byull. Inst. Biol. Vodochr. No. 6: 20. [In Russian].

Luft, K. The helminths of jay (Garrulus glandarius L.) and magpie (Pica pica L.) from Lublin Palatinate. Acta Parasit. polon. 8: 351-356.

Lukacsovics, F. Wirkung der Larve von Polymorphus minutus Goeze (Acanthocephala) auf die Art Gammarus roeseli Gerv. (Amphipoda). Ann. Inst. biol. (Tihany) hung. Acad. Sci. 26 1959: 31–39 4 figs. [German summary].

Lukin, E. I. Elements of the leech fauna of China and Japan of the Amur Basin within the ranges of the U.S.S.R. Zool. Zh. 39: 40-44. [English summary].

Lukin, E. L. & Epshtein, V. M. Endemic Baikal leeches of the family Glossiphonidae. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 131: 318-320 3 figs. [Dokl. Akad. Nauk S.S.R. 131: 457-460].

Lukose, J. A note on an association between two adult earthworms. Curr. Sci. 27: 106-107 1 fig.

Luli, M. see Erhardová, B.

Lund, E. E. Factors influencing the survival of *Heterakis* and *Histomonas* on soil. J. Parasit. 46 5 Sect. 2: 38. [Abstract].

Lutzens, H. Die stratigraphische und tektonische Stellung der Wernigeröder Schichten nach Conodonten. Geologie 8 1959: 71-92.

Lynsdale, J. A. On Proteocephalus sandoni n. sp. from the Sudan. J. Helminth. 34: 43-46 2 figs.

Lys, M. & Serre, B. Étude de conodontes du Dévonien et du Carbonifère de la région d'Adrar-Tanezrouft (Sahara). Rev. Inst. Franc. Petrol. 12 1957: 1035-1066 7 pls. [English summary].

Lys, M. see Serre, B.

Machado de Mendonca, J. ses Teixeira de Freitas, J. F.

Machado F., D. A. (1). Um novo gênero da família Quadrigyridae Van Cleave 1920 (Metacanthocephala, Palaeacanthocephala). Rev. bras. Biol. 20: 79-84 14 figs.

Machado F., D. A. (2). Uma nova espécie do gênero Neoechinorhynchus Hamann, 1892 parasita de "peixe-Martin" do Paraguai (Neochinorhynchidae, Archiacanthocephala). Rev. bras. Biol. 19 1959: 379–381 7 figs.

Mackie, G. O. Echiuroids from the Canary Islands. Ann. Mag. nat. Hist. (13) 3: 247-251 2 figs.

Mackiewicz, J. S. see Swanson, G. A.

Mackintosh, G. M. The morphology of the brassica root eelworm Heterodera cruciferae Franklin, 1945. Nematologica 5: 158-165 5 figs.

Macko, J. K. (1). Zur Fauna der Plathelminthen des schwarzen Storchs—Ciconia nigra L. Biológia, Bratislava 15: 549-552 2 figs. [German summary].

Macko, J. K. (2). Zur Fauna der Plathelminthen des Purpurreihers (Ardea purpurea L.). Biológia, Bratislava 15: 608-612 3 figs. [German summary].

Macko, J. K. (3). Saugwürmer E. sinorchis Oschmarin, 1956 und I. longiviellata Strom, 1947, Gefunden bei neuen Wirtstieren. Biológia, Bratislava 15: 694-699 2 figs. [German summary].

Macko, J. F. & Buša, V. Entwurf einer neuen systematischen Enteilung der Typhlozoeliden. Biológia, Bratislava 15: 250-262 3 pls. 1 fig. [German summary].

Macnab, J. A. & McKey-Fender, D. Subspecific variation in *Plutellus davisi* (Oligochaeta, Megascolecidae). Northw. Sci. **34**: 127-133 1 fig.

MacNeil, F. S. Cenozoic megafossils of Northern Alaska. Prof. Pap. U.S. geol. Surv. 294-C 1957: 95-126 7 pls.

Macy, R. W. (1). The life cycle of *Plagiorchis vespertilionis parorchis*, n.ssp. (Trematoda: Plagiorchiidae), and observations on the effects of light on the emergence of the cercaria. J. Parasit. 46: 337-345 2 pls. 2 figs.

Macy, R. W. (2). On the life cycle of Megalodiscus microphagus Ingles (Trematoda: Paramphistomatidae). J. Parasit. 46: 662.

Madanmohanroa, G. Salinity tolerance and oxygen consumption of the cattle leech, *Hirudinaria granulosa*. Proc. Ind. Acad. Sci. 51B: 211-218 3 figs.

Madruga, J. E. see Suárez-Caabro, J. A.

Maggenti, A. R. & Allen, M. W. The origin of the gelatinous matrix in *Meloidogyne*. Proc. helminth. Soc. Wash. 27: 4-10 5 figs.

Mai, W. F. see von Mechow Lewis, F.

Majewske, O. P. see Wilson, J. L.

Makarov, P. V. (1). Über den Mechanismus der Anaphasebewegung der Chromosomen. Biol. Zbl. 79: 413-422 2 figs.

Makarov, P. V. (2). [Investigations on gametogenesis in horse Ascaris in connection with the reductional division]. J. Obshch. Biol. 17 1956: 185–201 14 figs. [In Russian].

Maksimova, A. P. see Agapova, A. I.

Maksimova, S. V. Ilovuie trubki polikhet iz Nizhnegho Karbona Kuznetzkogho Basseina. [Mud tubes of polychaetes from the Lower Carboniferous of the Kuznetsk Basin]. Paleont. Zhurnal 1959 1: 118-120 1 pl.

Malek, E. A. (1). Human and animal schistosomiasis in Khartoum Province, Sudan. J. Parasit. 46:

Malek, E. A. (2). Bulinus (Bulinus) forskalii Ehrenberg, 1831: intermediate host of Gastrodiscus aegyptiacus (Cobbold, 1876) Looss, 1896. J. Parasit. 46 5 Sect. 2: 16. [Abstract].

Malek, E. A., Ash, L. R., Lee, H. F. & Little, M. D. Schistosomiasis in Louisiana mammals. J. Parasit. 46 5 Sect. 2: 34. [Abstract].

Malik, B. S., Rai, P. & Ahluwalia, S. S. A note on helminths of the Indian elephant. Indian J. Vet. Sci. 29 1959 [1960]: 11-17 4 figs.

Malzahn, E. Neue Fossilfunde und vertikale Verbreitung der niederrhenischen Zechsteinfauna in den Bohrungen Kamp 4 und Friedrich Heinrich 57 bei Kamp-Lintfort. Geol. Jb. 73 1958: 91-126 4 pls. fig.

Mandlowitz, S., Dusanic, D. & Lewert, R. M. Peptidase and lipase activity of extracts of Schistosoma mansoni cercaria. J. Parasit. 46: 89-90.

Mandlowitz, S. see Lewert, R. M.

Mañe-Garzon, F. Didymorchis haswelli n. sp. un nuevo Temnocephalida de la cavidad branquial de Parastacus saffordi Faxon. An. Mus. Hist. nat. Montevideo (2) 7: 1-94 pls.

Mann, K. H. see Warwick, T.

Manter, H. W. Some additional Digenea (Trematoda) from New Zealand fishes. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 197–201 4 figs.

Manter, H. W. L Pritchard, M. H. (1). Some digenetic trematodes of eels of Hawaii. J. Parasit. 46: 651-658 2 pls.

Manter, H. W. & Pritchard, M. H. (2). Some hemiurid trematodes from Hawaiian fishes. Proc. helminth. Soc. Wash. 27: 87-102 26 figs.

Manter, H. W. & Pritchard, M. H. (3). Additional hemiurid trematodes from Hawaiian fishes. Proc. helminth. Soc. Wash. 27: 165-180 20 figs.

[Marakov, V. V.]. [On the fauna of Sipunculida, Echiurida and Priapulida of the Far Eastern seas]. Invest. Far East. Seas U.S.S.R. 2 1950: 239-247. [In Russian].

Marcus, E. Turbellaria from Curação. Natuurw. Stud. Suriname No. 21: 41-51 15 figs.

Marcus, E. du B.-R. Notes on the fresh-water polychaete *Lycastopsis* from Curação. Natuurw. Stud. Suriname No. 21: 58-63 4 figs.

Margalef, R. Rotiferos marinas del plancton de la ría de Vigo. Invest. Pesq. 4 1956: 133-135 1 fig.

Margolis, L. A new nematode of the genus Cucullanus (Camallanata: Cucullanidae) from a flounder, Parophrys vetulus Girard, 1854, with notes on the species from Pleuronectiformes. Canad. J. Zool. 38: 839–849 13 figs.

Marinov, T. (1). Polychaete fauna of the Bulgarian Black Sea Coast. Izvest. Akad. Nauk, Sofiya Biol. 8 1959: 83-104 16 figs. [German summary].

Marinov, T. (2). [A list of Polychaetes from the Aegean Sea]. Izvest. Akad. Nauk, Sofiya Biol. 8 1959: 293-294. [Russian & German summaries].

Markewicz, F. J. see Ethington, R. L.

Markowski, S. Observations on the response of some benthonic organisms to power station cooling water. J. Anim. Ecol. 29: 349-357 2 figs.

Marquardt, W. C., Fritts, D. H., McAlpin, N. R. & Hawkins, W. W., Jr. The activity of bephenium embonate against the free-living and adult stages of Nematodirus spathiger. J. Parasit. 46: 42.

Marsden, J. R. Polychaetous annelids from shallow waters around Barbados and other islands of the West Indies, with notes on larval forms. Canad. J. Zool. 38: 989–1020 33 figs.

Marsden, P. H. see Facey, R. V.

Martin, W. E. (1). Hawaiian helminths, part III. New opecoelid trematodes. Pacif. Sci. 14: 411-415 10 figs.

Martin, W. E. (2). Hawaiian helminths. IV. Paracardicola hawaiensis n. gen., n. sp. (Trematoda: Sanguinicolidae) from the balloon fish, Tetraodon hispidus L. J. Parasit. 46: 648-650 l pl.

Martin, W. E. (3). Hawaiian helminths. II. Dactylostomum caballeroi n. sp. (Trematoda: Opecoelidae). in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 203-205 3 figs.

Martin, W. E. & Adams, J. E. Life-cycle of Acanthoparyphium spinulosum Johnston, 1917 (Echinostomatidae). J. Parasit. 46 5 Sect. 2: 35. [Abstract].

Martin, W. E. see Adams, J. E.

Martin, W. E. see Koratha, K. J.

Martinsson, A. Two assemblages of polychaete jaws from the Silurian of Gotland. Bull. geol. Inst. Univ. Uppsala 39: 1-8 l pl.

Massey, C. L. (1). Nematode parasites and associates of the California five-spined engraver, *Ips confusus* (Lec.). Proc. helminth. Soc. Wash. 27: 14-22 5 figs.

Massey, C. L. (2). A new species of Nematoda, Cylindrocorpus erectus, associated with Scolytus multistriatus Marsh. in American elm. Proc. helminth. Soc. Wash. 27: 42-44 l fig.

Massuti, M. Estudio del crecimiento relativo de Sagitta enflata Grassi del plancton de Castellon. Invest. Pesq. 13 1958: 37-48 6 figs.

Matjašič, J. Morphologie, biologie et zoogeographie des Temnocephales europiens et leur situation systematique. Razpr. Slov. Akad. Znan. Umetn. 5 1959: 141–1815 pls. 11 figs.

Matsumoto, M. Cytological study of iron of the chloragogen cells in the earthworms. Sci. Rep. Tôhoku Univ. (4) Biol. 36: 97-105 4 figs.

Maurmann, E. see Hauser, J.

Mawson, P. M. (1). Two new species of trichostrongyle nematodes from the Australian pouched mouse, *Phasogale flavipes* (Waterhouse). Parasitology 50: 425-429 11 figs.

Mawson, P. M. (2). Seuratinema Johnston et Mawson 1941, synonyme de Skrjabinema Gnédina 1933. Ann. Parasit, hum. comp. 35: 430-431 l fig.

Mayhew, R. L., Miller, G. C. & Torbert, B. J. Studies on bovine gastro-intestinal parasites. XXI. Immunity to Cooperia punctata and Oesophagostomum radiatum. J. Parasit. 46: 859-866.

McAlpin, N. R. see Marquardt, W. C.

McCauley, J. E. Some hemiurid trematodes of Oregon marine fishes. J. Parasit. 46: 84-89.

McCauley, J. E. & Pratt, I. (1). Aporchis continuus n. sp. (Trematoda: Echinostomatidae). J. Parasit. 46: 642-644 l pl.

McCauley, J. E. & Pratt, I. (2). The life-history of Echinochasmus milvi Yamaguti, 1939. J. Parasit. 46 5 Sect. 2: 15. [Abstract].

McConnaughey, B. H. The rhombogen phase of Dicyema sullivani McConnaughy (Mesozoa: Dicyemidae). J. Parasit. 46: 608.

McGowan, J. A. The relationship of the distribution of the planktonic worm, *Posobius meseres* Heath, to the water masses of the North Pacific. Deep Sea Res. 6: 125-139 7 figs.

McGregor, I. A. & Gilles, H. M. Further studies on the control of bancroftian filariasis in West Africa by means of diethylcarbamazine. Ann. trop. Med. Parasit. 54: 415-418 2 figs.

McIntosh, A. A new campulid Trematoda, Hunterotrema caballeroi, n. g., n. sp. from an Amazon dolphin, Inia geoffrensis. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 207-208 1 fig.

McIntyre, W. I. M. see Jarrett, W. F. H.

McKey-Fender, D. see Macnab, J. A.

McManus, L. R. Some ecological studies of the Branchiobdellidae (Oligochaeta). Trans. Amer. micr. Soc. 79: 420–428.

McTaggart, H. S. Helminths from the alimentary canal of farm mink in Britain. J. Helminth. 34: 247-258 2 figs. 1 pl.

Megemont, C., Dastague, G., Bastide, P. & Durel, B. Activité comparée en tant qu'effecteurs de l'acétylcholine de quelques anesthésiques locaux en présence du ventricule isolé d'Helix pomatia et de la musculature dorsale énervée d'Hirudo medicinalis. C.R. Soc. Biol. Paris 154: 64-66.

Megyeri, J. see Abrahám, A.

Mehra, K. N. see Waitz, J. A.

Meisenhelder, J. E., Olszewski, B. & Thompson, P. E. Observations on therapeutic and prophylactic effects of homologous immune blood against Schistosoms mansoni in rhesus monkeys. J. Parasit. 46: 645-647.

Meisenhelder, J. E. see Worley, D. E.

Mekbel, A. S. see Biagi, F. F.

Menzel, M. Y. & Short, R. B. Pachytene chromosomes in three species of schistosomes. J. Hered. Washington 51: 3-12 4 figs.

Menzel, M. Y. see Short, R. B.

Mergenhagen, S. E. see Millemann, R. E.

Merkusheva, I. V. [Helminths of rodents in Southern part of Belorussia]. Bull. Inst. Biol. for 1956, Minsk, 2 1957: 259-263. [In Russian].

Merkusheva, I. V. see Dilko, N. I.

Mettrick, D. F. (1). A new tapeworm, Choanotaenia angolensis, n. sp. from the Angola pitta, Pitta angolensis, in Southern Rhodesia. J. Parasit. 46: 398-299 2 figs.

Mettrick, D. F. (2). Two new species of the genus Paruterina Fuhrmann, 1906, from Passeriform birds in Southern Rhodesia. Proc. helminth. Soc. Wash. 27: 181-184 8 figs.

Mettrick, D. F. (3). A new cestode, Ophiotasnia ophiodex, n. sp., from a night-adder, Causus rhombeatus (Licht.), in Southern Rhodesia. Proc. helminth. Soc. Wash. 27: 275-278 3 figs.

Mettrick, D. F. (4). Helminth parasites of Hertfordshire birds. III. Nematodes. J. Helminth. 34: 259-266 8 figs.

Mettrick, D. F. (5). Helminth parasites of Hertfordshire birds. IV. Survey results. J. Helminth. 34: 267-276.

Mettrick, D. F. (6). Contributions to the helminth fauna of Central Africa. I. A redescription of Raillietina (Raillietina) werneri (Klaptocz, 1908) from the red-faced cody (Urocolius indicus) in Southern Rhodesia. Proc. Rhod. sci. Ass. 47: 47–50 2 figs.

Mettrick, D. F. & Weir, J. S. Speciation within the cestode genus *Inermicapsifer*. Rev. Biol. Lisboa 2: 137–149 4 figs.

Meyl, A. H. (1). Die Fadenwürmer (Nematoda) einiger Salzstellen südöstlich von Braunschweig. Abh. braunschw. Wiss. Ges. 6 1954: 84–106 2 pls.

Meyl, A. H. (2). Freilebende Nematoden aus binnenländischen Salzbiotopen zwischen Braunschweig und Magdeburg. Arch. Hydrobiol. 50 1955: 568-614 25 figs.

Meyer, F. P. The life cycle of Marsipometra hastata (Linton, 1898) Cooper, 1917. J. Parasit. 46 5 Sect. 2: 18. [Abstract].

Meyer, M. C. Notes on *Philonema agubernaculum* and other related dracunculoids infecting Salmonids. *in* Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 487–492.

Meyus, H., Clerx, J. & Evens, F. La bilharziose à Schistosoma mansoni du sud du Lac Kivu. Riv. Parassit. 21: 165-198 4 figs.

Michelson, E. H. see Chernin, E.

Mikailov, T. K. [On the parasites of some economic cyprinoid fishes of the river Kura]. Izv. Akad. Nauk. Azerb. S.S.R. biol. agr. 6 1959: 43-48. [Russian summary].

Mileikovskii, S. A. Reproduction and larval development of Harmothoe imbricata L. in the Barent Sea and other seas. Dokl. Akad. Nauk S.S.S.R. 128 1959: 418-421 2 figs. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 128 1959: 915-919 2 figs.

Millemann, R. E. & Mergenhagen, S. E. Studies on the penetration of schistosome cercariae. I. Action of the antihistamine promethazine hydrochloride. J. Parasit. 46: 155-163 1 pl.

Miller, G. C. & Harkema, R. A new locality record for Heterobilharzia americana. J. Parasit. 46 2: 206.

Miller, G. C. see Mayhew, R. L.

Milovanovič, D. & Živković, A. Limnološka ispitivanja baražuog jezera na Vlasini. Zborn. Rad. Inst. Ekol. & Biogeogr. Beograd 7 1956: 1–47 14 figs. [English summary].

Mimioglu, M., Güralp, N. & Sayin, F. Ankara köpeklerinde görülen parazit türleri ve bunlarin yayilis nisbeti. Vet. Fakul. Derg. Ankara Univ. 6: 53– 68 figs. [English summary].

Mines, J. J. see Sprent, J. F. A.

Mironov, G. N. [Feeding of planktonic predators. II. Feeding of Sagitta]. Trav. Sta. Biol. Sebastopol. 13: 78–88. [In Russian].

Mitzkevich, V. Y. Elaphostrongylus rangiferi spec. nov. parasite of the reindeer. Trud. Inst. Zool. Alma-Ata 12: 115-119 6 figs. [In Russian].

Miyazaki, I. & Yoshida, Y. On the first intermediate host of *Paragonimus ohirai* Miyazaki, 1939 and *P. iloktsumensis* Chen, 1940. J. Parasit. **46** 5 Sect. 2: 17. [Abstract].

Monin, H. see Nigon, V.

Monserrat, C. & Buenaventura, A. Pulmonary paragonimiasis in the Philippines. Report of a case discovered at autopsy with paragonimus and schistosome lesions. Philipp. J. Sci. 88: 363-371 4 pls.

Monteoliva, M. & Guevara, D. Estudio electroforético del líquido perivisceral de Ascaridia galli. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 493–499 2 figs.

Moon, A. P., Duxbury, R. E. & Sadun, E. H. Maintenance of *Dirofilaria uniformis* in laboratory animals. J. Parasit. 46 5 Sect. 2: 28-29. [Abstract].

Moon, A. P. see Duxbury, R. E.

Moore, J. P. On the contributions of Dr. Eduardo Caballero y C. to Mexican hirudinology. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 529–531.

Morais, T. de (1). Subsídios para o estudo dos moluscos hospedeiros intermediários da bilharziose nos distritos de Moçambique, Niassa e Cabo Delgado. An. Inst. Med. trop. Lisboa 16 1959: 187–198. [English and French summaries].

Morais, T. de (2). A bilharziose em Moçambique. An. Inst. Med. trop. Lisboa 16 1959: 179–186. [English and French summaries].

Moriarty, F. Laboratory errors associated with the estimation of the population density of *Heterodera* species in soil. Ann. appl. Biol. 48: 665-680 4 figs.

Morishita, K. & Tani, T. A case of Capillaria infection causing cutaneous creeping eruption in man. J. Parasit. 46: 79-83 l pl.

Morozov, G. F. Alterations in the system of the family Physalopteridae Leiper, 1908 in connection with the study of Pseudophysaloptera soricina Baylis, 1934. Zool. Zh. 39: 327-329. [English summary].

Moses, V. see Nicholas, W. L.

Mountain, W. B. see Pitcher, R. S.

Aı

C

for

E

ra

ti

8

te

0

Mueller, J. F. The immunologic basis of host specificity in the sparganum larva of Spirometra mansonoides. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 435–442 6 figs.

Müller, A. H. (1). "Helminthoide" Lebensspuren aus der Trias von Thüringen. Geologie 4 1955: 407-415 pls. 1-2.

Müller, A. H. (2). Über die Lebensspur Isopodichnus aus dem Oberen Buntsandstein (Unt. Röt) von Göschwitz bei Jena und Abdrücke ihres mutmasspichen Erzeugers. Geologie 4 1955: 481–489 pls. 1–2.

Müller, A. H. (3). Das erste Benthos (Planolites? vermiculare n. sp.) aus dem Stinkschiefer mitteldeutschlands (Zechstein, Stassfurtserie). Geologie 4 1955: 655-659 text-figs. 1-2.

Müller, A. H. (4). Lehrbuch der paläozoology Band II. Invertebraten. Teil 1. Protozoa-Mollusca 1. Jena, 1958.

Müller, E. M. see Müller, K. J.

Müller, K. J. (1). Conodonten der oberdevonischen Independence-Schichten in Iowa. Paläont. Z. 32 1958:

Müller, K. J. (2). Kambrische Conodonten. Z. dtsch. geol. Ges. 111 1959: 434-485 5 pls. figs.

Müller, K. J. (3). Kambrische Conodonten. Paläont. Z. 34: 12.

Müller, K. J. (4). Wert und Greuzen der Conodonten—Stratigraphie. Geol. Rdsch. 49: 83–92 figs.

Müller, K. J. & Müller, E. M. Early Upper Devonian (Independence) Conodonts from Iowa, Part 1. J. Paleont. 31 1957: 1069-1108 8 pls. figs.

Mulligan, W. see Jarrett, W. F. H.

Mulvey, R. H. (1). Giant larvae of the clover cystnematode Heterodera trifolii (Nematoda: Heteroderidae). Nematologica 5: 53-55 l pl.

Mulvey, R. H. (2). Abnormalities in second-stage larvae of Heterodera trifolii Goffart, 1932 (Nematoda: Heteroderidae). Canad. J. Zool. 38: 777-779 1 pl. 1 fig.

Mumford, E. P. The distribution of some parasites of man in the Near and Middle East. J. trop. Med. Hyg. 63: 77-85.

Münnich, H. Histochemische Untersuchungen an Dorn, Leber und Lingen der weissen Maus und Invasion mit Larven des Spulwurms Assaris lumbricoides. Wiss. Z. Humboldt. Univ. Berlin Math. Nat. R. 9: 389-403 12 figs. [English, etc., summaries].

Myer, D. G. On the life history of Mesostephanus kentuckiensis (Cable, 1935). n. comb. (Trematoda: Cyathocotylidae). J. Parasit. 46: 819-832 2 pls.

Myers, B. J. (1). On the morphology and life history of *Phocanema decipiens* (Krabbe, 1878) Myers, 1959 (Nematoda: Anisakidae). Canad. J. Zool. 38: 331-344 5 figs.

Myers, B. J. (2). A note on some helminths from Malayan animals. Canad. J. Zool. 38: 440-441.

Myers, B. J. & Kuntz, R. E. Nematode parasites from vertebrates taken on Lan Yü, Formosa. I. Nematodes from *Rattus rattus*. Canad. J. Zool. **38**: 857-858.

Myers, B.-J., Wolfgang, R. W. & Kuntz, R. E. Helminth parasites from vertebrates taken in the Sudan (East Africa). Canad. J. Zool. 38: 833-836.

Myers, B. J. see Cameron, T. W. M.

Myers, R. F. The sensitivity of some plant-parasitic and free-living nematodes to gamma and X-irradiation. Nematologica 5: 56-63.

Myers, R. F. see Dropkin, V. H.

Nadakal, A. M. (1). Chemical nature of cercarial eye-spot and other tissue pigments. J. Parasit. 46: 475-483 2 pls.

Nadakal, A. M. (2). Types and sources of pigments in certain species of larval trematodes. J. Parasit. 46: 777-786 8 figs.

Nadakal, A. M. (3). Protoschelobates sp., an oribatid mite from India, as a potential vector of the sheep tape worms Moniezia benedeni and M. expansa. J. Parasit. 46: 817.

Nadakal, A. M. (4). Observations on the life-cycle of Avitellina centripunctata (Rivolta, 1874), an anoplocephaline cestode from sheep and goats. J. Parasit. 46 5 Sect. 2: 12. [Abstract].

Nadakal, A. M. (5). Studies on the excretory and nervous systems of the sheep tape worm Avitellina centripunctata (Rivolta, 1874). J. Parasit. 46 5 Sect. 2: 12-13. [Abstract].

Nadakal, A. M. (6). Biochromes in certain species of larval trematodes. J. Parasit. 46 5 Sect. 2: 31. [Abstract].

Nagaty, H. F. & Khalil, H. M. (1). Piperazine adipate in *Heterophyes heterophyes* and other helminth infections. The Lancet: 978.

Nagaty, H. F. & Khalil, H. M. (2). Incidence of parasitic infections among the outpatients attending the Rural Health Unit at Ezbet-El-Burg, Damietta Province, Egypt, U.A.R. J. Egypt. Med. Ass. 43: 298-311 tabs. & figs.

Nagaty, H. F. & Rifaat, M. A. Treatment of Schistosomiasis, Past and Present. Part I. Historical Review of the use of Antimony in the treatment of Bilharziasis. Part II. Clinical investigations on the treatment of urinary and intestinal bilharziasis with TWSb (Antimonydimercaptosuccinate) with a critical study of its toxic side effects. Part III. Synergism between Antimony (Tartar Emetic), and Thioxanthene compounds in the treatment of Schistosomiasis. J. Egypt. Med. Ass. 43: 659-707.

Nagaty, H. F., Rifaat, M. A. & Khalil, H. M. Clinical trials of the antibilharzial effect of a new thioxanthone compound (preparation 17581 Ciba). in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 209–214.

Najarian, H. H. The effect of Schistosoma haematobium infection on egg-production in the snail Bulinus truncatus. J. Parasit. 46 5 Sect. 2: 35. [Abstract].

Nasir, P. (1). Trematode parasites of snails from Edgbaston Pool: the life history of the strigeid Cotylunus Dubois & Rausch, 1950. Parasitology 50: 551-575 8 figs.

Nasir, P. (2). A new stylet-cercaria, C. edgbastonensis from Lymnaea stagnalis L. Proc. helminth. Soc. Wash. 27: 124-126 3 figs.

Nasir, P. (3). Studies on the life history of *Echinostoma* nudicaudatum n. sp. (Echinostomatidae: Trematoda). J. Parasit. 46: 833-847 l pl.

Nasir, P. see De Giusti, D. L.

Neal, B. J. Two parasites from coati in southern Arizona. J. Parasit. 46: 647.

Nebol'sina, T. K. Infection of yearlings of Caspian Clupeidae of the genus Alosa by the monogenetic trematode Mazocraes alosa. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 131: 291–292 1 fig. [Dokl. Akad. Nauk S.S.S.R. 131: 1478–1480].

Needham, A. E. The arginase activity of the tissues of the earthworms *Lumbricus terrestris* L., and *Eisenia foetida* (Savigny). J. exp. Biol. 37: 775–782.

Neufahrt, A. Untersuchungen über die Wirkungen von UV—und Röntgenstrahlen auf die Mitose des Eies von Parascaris equorum (Goeze) mit Hilfe des Zeitrafferfilms. Protoplasma 52: 473–517 36 figs.

Nicholas, W. L., Dougherty, E. C., Hansen, E. L., Holm-Hansen, O. & Moses, V. The incorporation of <sup>14</sup>C from sodium acetate-2- <sup>14</sup>C into the amino acids of the soil-inhabiting nematode, *Caenorhabditis briggsae*. J. exp. Biol. 37: 435-443 | pl. 1 fig.

Nicol, J. A. C. The regulation of light emission in animals. Biol. Rev. 35: 1-42 4 figs.

Nielsen, C. O. see Christensen, B.

Niewiadomska, K. On two cercariae of the genus Tylodelphys Dies: T. excavata (Rud.) and T. clavata (Nord.) Diplostomatidae. Acta Parasit. polon. 8: 427-437 5 figs.

Niewiadomska, K. see Kozicka, J.

Nigon, V., Guerrier, P. & Monin, H. L'architecture polaire de l'oeuf et les movements des constituents cellulaires au cours des premières étapes du développement chez quelques nématodes. Bull. biol. 94: 131-202 6 pls. 27 figs.

Noble, E. R. Fishes and their parasite-mix as objects for ecological studies. Ecology 41: 593-596.

Noble, E. R. & King, R. E. The ecology of the fish Gillichthys mirabilis and one of its nematode parasites. J. Parasit. 48: 679-685 4 figs.

Noda, K. see Alicata, J. E.

Nolte, H.-W. Ditylenchus dipsaci (Kühn) an Knoblauch (Allium sativum L.). Nematologica Suppl. II: 61-63 l pl.

Nonato, E. Sôbre duas Arenicolas da Costa Brasileira (Annelida, Polychaete). Contr. avuls. Inst. occanogr. S. Paulo No. 3 1958: 1-6 1 pl.

Odening, K. (1). Zur Kenntnis einiger Trematoden aus Schlangen. Zool. Anz. 165: 337-340 3 figs.

Odening, K. (2). Das Exkretionssystem von Leptophallus nigrovenosus (Bellingham 1844) (Trematoda: Plagiorchiata). Monat. dtsch. Akad. Wiss. 2: 33-36 1 fig.

Odening, K. (3). Zur Grosseinteilung der digenetischen Trematoden. Z. Parasit. 20: 170-174.

Odening, K. (4). Das Exkretionssystem von Telorchis assula (Dujardin 1845). (Trematoda, Ochetosomatoidea). Z. Parasit. 20: 335-344 2 figs.

Odening, K. (5). Das Exkretionsgefässsystem von Haematoloechus variegatus und H. asper (Trematoda, Plagoiorchiidae). Biol. Zentralb. Leipzig. 79: 91-96 3 figs.

Odening, K. (6). Eine neue Concinnum—Art (Trematoda: Dicrocoeliidae) aus Herpestes brachyurus (Carnivora: Viverridae). Biol. Zentralb. 79: 513-519 figs.

Odening, K. (7). Studien an Trematoden aus Schlangen, Vögeln und Säugetieren. Monat. Dtsch. Akad. Wiss. Berlin 2: 438–445 5 figs.

Odening, K. (8). Der Ansatzmodus des Exkretionsgefässsystems und die systematische Stellung von Encyclometra (Trematoda, Digenea). Monat. Dtsch. Akad. Wiss. Berlin. 2: 445-449 2 figs.

Odening, K. (9). Revision der Unterfamilie Haematoloechinae Freitas & Lent 1939 (Trematoda: Plagiorchiidae). Monatb. Deutsch. Akad. Wissen. Berlin 2: 449-454.

Odetoyinbo, J. A. & Ulmer, M. J. Microfilarial periodicity of Splendidofilaria quiscali (von Linstow, 1904) n. comb. (Nematoda: Onchoceridae). J. Parasit. 46 5 Sect. 2: 18–19. [Abstract].

Oliveira, P. E. Invertebrados Cretácicos do fosfato de Pernambuco. Bol. Div. Geol. min. Rio de J. 182 1957: 1-29 2 pls. [English summary].

Oliver-Gonzalez, J. & Anderson, R. I. Immunity to parasites. [Summary of a discussion]. Proc. helminth. Soc. Wash. 27: 231.

Ollerenshaw, C. B. see Rowcliffe, S. A.

Olsen, L. J. & Ewert, A. Immunological tolerance studies with white mice and *Trichinella spiralis*. J. Parasit. 46 5 Sect. 2: 22. [Abstract].

Olsen, L. S. & Kelley, G. W. Some characteristics of the early phase of migration of larvae of Ascaris suum. Proc. helminth. Soc. Wash. 27: 115-118.

Olsen, O. W. Sylvatic trichinosis in carnivorous mammals in the Rocky Mountain region of Colorado. J. Parasit. 46 5 Sect. 2: 22. [Abstract].

Olsen, O. W. see Robinson, H. A.

Olson, L. J. see Ewert, A.

Olszewski, B. see Meisenhelder, J. E.

Omodeo, P. Cariologia dei Lumbricidae. II. Contributo. Caryologia 8 1955: 135-178 16 figs.

Omodeo, P. Ricerche zoologiche sul massiccio del Pollino (Lucania calabria). XXVIII. Oligocheti (secondo contributo). Annu. Ist. Zool. Univ. Napoli 11 (3) 1959 [1960]: 1-7.

Osche, G. Systematische, morphologische und parasitophyletische Studien an parasitischen Oxyuroidea (Nematoda) exotischer Diplopoden. (Ein Beitrag zur Morphologie des Sexualdimorphismus). Zool. Jb. (Syst.) 87: 395-440 13 figs.

Oshmarin, P. G. On the differentiation of the body of trematodes into motor and genital parts and on the phylogenetical age of this property. Acta Vet. hung. 8 1958: 257-263.

Oshmarin, P. G. see Parukhin, A. M.

Osipov, A. N. see Gnedina, M. G.

Ouden, H. den (1). Periodicity in spontaneous hatching of *Heterodera rostochiensis* in the soil. Nematologica Suppl. II: 101–105.

Ouden, H. den (2). A note on parthenogenesis and sex determination in *Heterodera rostochiensis* Woll. Nematologica 5: 215–216.

Ouden, H. den (3). An improved method for making thin agar layers in polyethylene bags. Nematologica 5: 255-259 2 pls. 2 figs.

Ouspenskaia [Uspenskaja], A. V. Parasitofaune des Crustacés benthiques de la mer de Barents. (Exposé préliminaire). Ann. Parasit. hum. comp. 35: 221-242 44 fios.

Owen, I. L. see Llewellyn, J.

Owen, L. N. see Clarkson, M. J.

Owre, H. B. Plankton of the Florida Current. Part VI. The Chaetognatha. Bull. mar. Sci. Gulf & Caribbean 10: 255-322 33 figs.

Oye, E. van & Pierquin, L. La repartition geographique des filarioses humaines au Congo et du Ruanda-Urundi. Biol. Jaarb. 28: 101-118 5 maps.

Paetzold, D. Nachtrag zur Arbeit "Beiträge zur Nematodenfauna mitteldeutscher Salzstellen im Raum von Halle". Opusc. Zool. Budapest 3 1959: 81-82.

Pande, B. P. On Brijicola caballeroi, n. gen., n. sp., a digenetic trematode from the little egret. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 227-232 6 figs.

Pande, B. P., Ahluwalia, S. S. & Srivastava, J. S. Note on host-parasite relationships observed in fluke infections of wild aquatic bids. Parasitology 50: 323-327 5 figs.

Pande, B. P. & Bhatia, B. B. On Ogmocotyle indica (Bhalerao, 1942) Ruiz, 1946 (Trematoda), the notocotylid monostome of Indian ovines, and its pathogenicity. J. Parasit. 46: 800-802 1 fig.

Panin, V. Y. On Helminths of birds in Zaïsansk depression. Trud. Inst. Zool. Alma-Ata 12: 166-172. [In Russian].

Panin, V. Y. see Sokolova, I. B.

Panseri, C. & Barsotti, G. Conodontos y Ostrácodos devonianos de la región de Semara (Sahara español). Notas Inst. geol. Esp. 55 1959: 145–176 4 pls. [English summary].

Pantelouris, E. M. & Gresson, R. A. R. Autoradiographie studies on Fasciola hepatica. Parasitology 50: 165-169 l.pl.

Panzer, J. D. see Caveness, F. E.

Papa, R. Del. Presenza di un Dendrocoelum nelle grotte friulane. Atti Soc. tosc. Sci. nat. 66B: 56-59

Papi, F. (1). Sopra due Turbellari rinvenuti nell' humus dell' Orto botanico pisano. Atti Soc. tosc. Sci. nat. 66B: 33-38 8 figs.

Papi, F. (2). Ricerche su alcuni generi affini della fam. Typhloplanidae (Turbellaria Neorhabdocoela). Arch. zool. ital. 44 1959 [1960]: 1-51 75 figs.

Parenti, U. (1). Citotassonomia del genere Ophryotrocha (Annelida, Polichaeta). R.C. Accad. Lincei (8) 28: 386-389 1 pl. 1 fig.

Parenti, U. (2). Self-fertilisation in Ophryotrocha labronica. Experientia 16: 413-414 2 figs.

Parise, A. Variabilità di Keratella cochlearis (Gosse) (Rotatoria) nel lago di Nemi. Atti Accad. Padova 70 [1958]: 11-26 3 figs.

Parker, J. C. & Haley, A. J. Method for determination of the number of gyrodactylid trematodes parasitizing the skin of goldfish. J. Parasit. 46: 417.

Parukhin, A. M. & Oshmarin, P. G. Nematodes Encephalonema longimicrofilaria gen. et sp. nov. from the brain of birds. Zool. Zh. 39: 934–936 l fig. [English summary].

Pasquini, P., Ghirardelli, E. & Lesi-Massari, A. Sulla istogenesi rigenerativa in dischetti isolati dal corpo di *Planaria torva*. R.C. Accad. Bologna Cl. Sci. Fis. (11) 2 1955: 131-138.

Pasquini, P., Ghirardelli, E. & Rusticali, A. Sulla rigenerazione di dischetti isolati dal corpo delle Planarie (*Planaria torva*). R.C. Accad. Bologna Cl. Sci. Fis. (11) 2 1955: 139-147 4 figs.

Patrick, Z. A. see Pitcher, R. S.

Patyk, S. Helminths in the alimentary tract of cattle in West Poland. Acta Parasit. polon. 8: 231-253 1 fig.

Patyk, W. see Zarnowski, E.

Paulian, P. see Campana-Rouget, Y.

Paulyukonis, F. V. Economical losses caused by fasciolosis in cattle and sheep in Lithuania. Trud. Akad. Nauk. Lithuan. S.S.R. (B.) 2 (22): 149–161. [In Russian].

Pawlowski, L. K. & Hoffmann, J. Note comparative sur la configuration des cocons des Piscicolidées: Cystobranchus fasciatus (Koller) et Cystobranchus respiratus (Troschel). Arch Inst. Grand-Duc. Luxemb. N.S. 26 1959: 187–193 4 figs.

Peacock, F. C. Inhibition of root-knot development on tomato by systemic compounds. Nematologica 5: 219-227.

Peacock, F. C. see Goodey, J. B.

Pearson, J. C. On the life cycle of Neodiplostomum buteonis and the occurrence of a periprostate (Trematoda: Diplostomatidae). J. Parasit. 46: 48.

Pellegrino, J. & Rodrigues, B. A. The influence of Seitz filtration on the activity of Schistosoma mansoni (adult worm) antigen. J. Parasit. 46: 647.

Péna, B. see Diaz Ungria, C.

Pesonen, T. & Wikgren, B.-J. Bandmsaklarvernas salt- och temperaturtolerans. Memor. Soc. Fauna Flor. fenn. 35: 112–118.

**P[eters]**, B. G. Daniel Owen Morgan, 1893–1959. J. Helminth. **34**: i–2 l pl.

Peters, L. E. The systematic position of the genus Dihemistephanus Looss, 1901 (Trematoda: Digenea), with the redescription of D. lydiae (Stossich, 1896) from the South Pacific. Proc. helminth. Soc. Wash. 27: 134–138 6 figs.

Peters, W. Zucht und Beobachtung von Süsswasser Oligochaeten. Mikrokosmos 49: 129–132 2 figs.

Peterson, J. E. Living nematodes for classroom use. Turtox News 38: 22-23.

Petrochenko, V. I. An elucidation of the life cycle of the goose tapeworm *Drepanidataenia przewalskii* Skryabin, 1914. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 130: 135-136 l fig. Dokl. Akad. Nauk S.S.S.R. 130: 946-948 l fig.

Petrovskaya, N. V. [To the ecology of polychaets of the Eastern Murman and some data regarding periods of reproduction and larval stages]. Trud. Murman. Biol. Inst. 5: 28-67 35 figs. [In Russian].

Petrushevsky, G. K. & Petrushevskaja, M. A. The accuracy of quantitative indices under the study of the parasitofauna of fishes. Mag. Parasit., Leningr. 19: 333–343 5 figs.

Petrushevskaya, M. G. see Petrushevsky, G. K.

Petter, A. J. La blatte germanique (Blattella germanica L.), hôte intermédiaire probable d'Abbreviata caucasica (Linstow, 1902), Nématode parasite des Primates et de l'Homme. C.R. Soc. Biol. Paris 154: 87-90 4 figs.

Petter, A. J. see Chabaud, A. G.

por upt

upt 2 fi

An

Scl

kra 195

por Hyr

54 F F

the

249 Mo 143

Dév 839-P Con

P

infe trop sum P

P

on

Ann Stud penet und

2 pl P lumb 5 Se

Potion 1959

V

Petter, C. Etude zoologique de la Larva migrans. Ann. Parasit. hum. comp. 35: 118-137.

Pfeiffer, H. Hymenosphenacanthus bulbocirrosus spec. nov. (Hymenolepididae), ein neuer Bandwurm des Schwarzhalsschwanes. Z. Parasit. 20: 345-349 3 figs.

Pflugfelder, O. Das Jugendstadium des Enten-kratzers Polymorphus boschadis Schr. Mikrokosmos 46 1957: 193–195 3 figs.

Phifer, K. (1). Permeation and membrance transport in animal parasites: Further observations on the uptake of glucose by Hymenolepis diminuta. J. Parasit. 46: 137-144.

Phifer, K. (2). Permeation and membrance transport in animal parasites: on the mechanism of glucose uptake by Hymenolepis diminuta. J. Parasit. 46: 145-153

Phifer, K. (3). Permeation and membrance transport in animal parasites: the absorption of glucose by Hymenolepis diminuta. J. Parasit. 46: 51-62 2 pls.

Phillips, R. R. see Roots, B. I.

Phillipson, R. F. & Kershaw, W. E. The production, deposition and growth of the larvae of Trichinella spiralis, and their significance in the chemotherapy of the infection. I. Introduction, summary of experimental results, and discussion. Ann. trop. Med. Parasit. **54**: 250-251.

Philpott, D. E. see Cardell, R. R.

Picciochi, P. G. C. see Serra, J. A.

Pteczynska, E. Tobrilus vistula n. sp. (Nematoda, Tripylidae). Bull. Acad. polon. Sci. Sér. Sci. biol. 8: 249-251 4 figs.

Pierce, W. D. Silicified Turbellaria from Calico Mountains nodules. Bull. S. Calif. Acad. Sci. 59: 138-143 2 pls.

Pierquin, L. see Oye, E. van.

Pillet, J. Sur deux espèces d'Annélides tubicoles du Dévonien armoricain. Bull. Soc. géol. Fr. (6) 6 1957 : 839-846 1 pl. figs.

Pinon, M. see Puytorac, P. de.

Pires, F. M., David, J. H. S. & Silva, J. A. A. Oe. Contribuição para o estudo das filaríases na Lunda. Microfilárias sanguícolas: incidencia e espécie infestante na circumscripção do Chitato. An. Inst. Med. trop. Lisboa 16 1959: 461-479. [English and French summaries !

Pistor, W. J. see Dewhirst, L. W.

Pitcher, R. S. see Goodey, J. B.

Pitchford, R. J. & Visser, P. S. Some observations on Schistosoma mansoni in rodents in the Transvaal. Ann. trop. Med. Parasit. 54: 247-249 2 figs. 1 pl.

Pitcher, R. S., Patrick, Z. A. & Mountain, W. B. Studies on the host-parasite relations of Pratylenchus penetrans (Cobb) to apple seedlings. I. Pathogenicity under sterile conditions. Nematologica 5: 309-314

Pitts, T. D. In vitro culture of the larvae of Ascaris lumbricoides suum. A report on progress. J. Parasit. 46 5 Sect. 2: 24-25. [Abstract].

Piusiński, W. see Fagasiński, A.

Poddubnaja, T. C. About autonomy and regenera-tion inTubificidae. Byull. Inst. Biol. Vodochr. No. 5 1959: 15-16. [In Russian].

Pogoreltzeva, T. P. [To the study of Cestodes, parasites of Black Sea fishes]. Trud. Karadag. biol. Sta. 16: 143-159 14 figs. [In Russian].

Pokorný, V. Grundzüge der Zoologischen Mikropaläontologie. Band. 2. Berlin 1958.

Pop, V. & Dragos, M. Contributions à la connais-sance de la structure de la musculature chez les Lumbricides. Stud. Univ. Babes-Bolyai, Cluj (2) No. 2 Biol. : 99-103 3 figs. [French summary].

Pope, E. C. [A further note on the giant earthworm from Kyogle, N.S.W.]. Abstr. Linn. Soc. N.S.W., No. 671 1957: [3].

Pourriot, R. Recherches sur la biologie du Rotifère Eosphora nayas Ehrenberg. Hydrobiologia 16: 309-322

Prakash, A. & Adams, J. R. A histopathological study of the intestinal lesions induced by *Echinorhynchus* lageniformis (Acanthocephala-Echinorhynchidae) in the starry flounder. Canad. J. Zool. 38: 895-897 2 pls.

Pratt, I. see Bennington, E.

Pratt, I. see McCauley, J. E.

Pravda, O., Bican, J. & Brom, F. Beitrag zur limnologischen Durchforschung der Teiche im budweiser Becken. Sborn. kraysk. vlast. Mus. Přír. Věd. 1 1958: 77-106. [German summary].

Prestage, J. J. The fine structure of the growth region of ovary in Ascaris lumbricoides var. suum with special reference to the rachis. J. Parasit. 46: 69-78 5 pls.

Přibyl, A. Nové poznatky o surchnokarbonskí sladkovodní a kontinentální fauně z oztravsko-karvinské oblasti. Rozpr. česk. Akad. Věd. Řada mat. přírod. Přibyl, A. oblasti. Rozpr. česk. Akad. Včd. F 70: 1-71 7 pls. [German summary].

Price, E. W. (1). The giant marlin, Makiara marlina Jordan and Evermann, a new host for Capsala pricei Hidalgo, 1959, with a review of the subfamily Capsalinae. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 237-244 fig.

Price, E. W. (2). A note on Ogmocotyle ailuri (Price, 1954) (Trematoda: Notocotylidae). Proc. helminth. Soc. Wash. 27: 119-121 1 fig.

Price, J. H. see Watson, N. H. F.

Pritchard, M. H. Preptetos caballeroi n. gen., n. sp. and Labrifer tertius n. sp. (Trematoda: Lepocreadiidae) from fishes of Hawaii. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 245-251 3 figs.

Pritchard, M. H. see Manter, H. W.

Prokopič, J. (1). Resultaty gelmintologičeskich issledovanij sobak i košck v Albanii. Česk. Parasit. 7: 139-149 5 figs. [French summary].

Prokopič, J. (2). K gelmintofaune amfibij Albanii. Česk. Parasit. 7: 151-158. [French summary].

Prokopič, J. see Erhardova, B.

Prost, M. Dactylog yrus caballeroi sp. n., a new species of Monogenoidea. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 253-256 3 figs.

Provenza, D. V. see Cheng, T. C.

Prudhoe, S. On two new parasitic worms from Brazil. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 415-421 5 figs. Pulse, R. R. & Sweet, W. C. The American Upper Ordovician standard. III. Conodonts from the Fairview and McMillan formations of Ohio, Kentucky and Indiana. J. Paleont. 34: 237–264 3 pls. figs.

Puytorac, P. de & Grain, J. Sur deux grégarines du genre Monocystella endoparasites des planaires Ochridiennes: Fonticola ochridana Stankovič et Neodendrocoelum sancti-naumi Stankovič. Ann. Parasit. hum. comp. 35: 197-208 8 figs.

Puytorac, P. de & Pinon, M. Etude des variations du poids de Lumbriaus terrestris (Ver Oligochète) immergés dans l'eau. Arch. Zool. exp. gén. (Notes et Rev.) 99: 23-438 figs.

Qasim, S. Z. see Hasan, R.

Radwan, S. Helminth parasites of unbred fishes in a pond husbandry. Acta Parasit. polon. 8: 289-297 l fig.

Raenber, A. see Stelter, H.

Rai, P. see Malik, B. S.

Raj, P. J. S. Studies on the marine leech Branchellion plicobranchus Raj (Family Piscicolidae) from India. J. 2001. Soc. India 11 1959 [1960]: 152-161 7 figs.

Ramachandran, C. P., Edeson, J. F. B. & Kershaw, W. E. Aëdes aegypti as an experimental vector of Brugia malayi. Ann. trop. Med. Parasit. 54: 371-375.

Ramalingam, K. (1). On a new species of the genus Heteromicrocotyle (Monogenea: Microcotylidae) from the gills of Caranx affinis Rupp. J. zool. Soc. India 12: 34-39 5 figs.

Ramalingam, K. (2). The functional development of "compensating asymmetry" in the higher Monogenea. Z. wiss. Zool. 164: 374-381 3 figs.

Ramos, D. B. see Faust, E. C.

Ranade, M. R. see Kewalramani, H. G.

Rangaswami, G., Vasantharajan, V. N. & Venkatesan, R. The occurrence of root-knot nematodes on sugarcane and on some weeds. Curr. Sci. 29: 236-237 1 fig.

Rao, K. H. Studies on *Penetrocephalus ganapati*, a new genus (Cestoda: Pseudophyllidea) from the marine teleost *Saurida tumbil* (Bloch). Parasitology **50**: 155–163 8 figs. 1 pl.

Raski, D. J. & Hewitt, W. B. Experiments with Xiphenema index as a vector of fanleaf of grapevines. Nematologica 5: 166-170.

Rausch, R. L. (1). Recent studies on hydatid disease in Alaska. Parassit. 2: 391-398 2 figs.

Rausch, R. (2). Studies on the helminth fauna of Alaska. XXXVII. Description of Schizorchis caballeroin. sp. (Cestoda: Anoplocephalidae), with notes on other parasites of Ochotona. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico D.F. (Instituto Politecnico Nacional): 399–405 4 firs.

Rawson, D. & Rigby, J. E. The functional anatomy of the cysticercoid of *Choanotaenia crassiscolex* (Linstow 1890) (Dilepididae) from the digestive gland of *Oxychilus cellarius* (Müll.) (Stylommatophora), with some observations on developmental stages. Parasitology 50: 453-468 5 figs. 1 pl.

Razarihelisoa, M. Sur quelques trématodes digènes de poissons de Nossibé (Madagascar). Bull. Soc. zool. Fr. 84 1959 [1960]: 421-434 6 figs.

Read, C. P., Simmons, J. E. & Rothman, A. H. Permeation and membrance transport in animal parasites: amino acid permeation into tapeworms from elasmobranchs. J. Parasit. 46: 33-41 2 pls.

Read, C. P. see Simmons, J. E., Jr.

Read, C. P. see Wertheim, G.

Rebecq, J. Timoniella atherinae nov. gen., nov. sp. (Trematoda, Acanthostomatidae), métacercaire paraste d'Atherina mochon C.V. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 257-262 5 figs.

Reed, R. E. see Dewhirst, L. W.

Rees, B. Albertia vermicularis (Rotifera) parasitic in the earthworm Allolobophora caliginosa. Parasitology 50: 61-66 4 figs. 1 pl.

Rego, A. A. Redescrição de Artionema bidentata (Molin, 1858) comb. n. (Nematoda, Filarioidea). Mem. Inst. O. Cruz **58**: 149-156 8 figs.

Reid, W. M. (1). Effects of temperature on the development of the eggs of *Ascaridia galli*. J. Parasit. 46: 63-67 fig.

Reid, W. M. (2). Egg characteristics as aids in species identification and control of chicken tapeworms. Avian Diseases 3 1959: 188–197 9 figs.

Reineck, H.-E. Über eingeregelte und verschachtelte Röhren des Goldköcher-Wurmes (*Pectinaria koreni*). Natur. u. Volk **90**: 334–337 5 figs.

Reish, D. J. A new species of Sabellidae (Annelida, Polychaeta) from southern California. Ann. Mag. nat. Hist. (13) 2 1959 [1960]: 717-719 5 figs.

Reish, D. J. & Barnard, J. L. Field toxicity tests in marine waters utilizing the polychaetous annelid Capitella capitala (Fabricius). Pacif. Nat. 1: 1-8 5 figs.

Reisinger, E. (1). Was ist *Xenoturbella*. Z. wiss. Zool. 164: 188-198 3 figs.

Reisinger, E. (2). Vitale Nervenfärbungen bei Plathelminthen und ihre Abhängigkeit vom physiologischen Zustand des Organismus. Z. wiss. Zool. 164: 271-293 8 figs.

Reisinger, E. (3). Die Lösung des Parergodrilus-Problems. Z. Morph. Ökol. Tiere 48: 517-544.

**Rexroad,** C. B. (1). Conodonts from the Chester Series in the type area of Southwestern Illinois. Rep. Invest. Ill. geol. Surv. 199 1957: 1-43 4 pls. figs.

**Rexroad,** C. B. (2). Conodonts from the Glen Dean Formation (Chester) of the Illinois Basin. Rep. Invest. Ill. geol. Surv. 209 1958: 1–27 6 pls. figs.

Rexroad, C. B. (3). The conodont homeomorphs Taphrograthus and Streptognathodus. J. Paleont. 32 1958: 1158-1159.

Rexroad, C. B. & Clarke, C. E. Conodonts from the Glen Dean formation of Kentucky and equivalent formations of Virginia and West Virginia. J. Paleont. 34: 1202-1206 fig.

Rexroad, C. B. see Collinson, C.

Reynoldson, T. B. A quantitative study of the population biology of *Polycelis tenuis* (Ijima) (Turbellaria, Tricladida). Oikos 11: 125-141 3 figs.

Rhodes, F. H. T. & Dineley, D. L. (1). Devonian Conodont faunas from Southwest England. J. Paleont. 31 1957: 353-369 2 pls. figs. Rhodes, F. H. T. & Dineley, D. L. (2). Supplementary notes on Devonian Conodont faunas from Southwest England. J. Paleont. 31 1957: 1175.

Rhodes, F. H. T. & Wingard, P. S. Chemical composition, microstructure and affinities of the Neurodontiformes. J. Paleont. 31 1957: 448-454 figs.

Rhodes, F. H. T. see Dineley, D. L.

Ricci, M. & Gagliano, E. Note sull'azione antielmintica della ditiazanina. Riv. Parassit. 21: 151-154

Richardson, T. see Campbell, W. C.

Ridder, M. De (1). Recherches sur les rotiferes des eaux Saumatres. IV. Rotifères planctoniques du port d'Ostende. Bull. Inst. Sci. nat. belg. 35 1959: 1-23 1 fig.

Ridder, M. de (2). Deuxieme liste de rotiferes de la Camargue. Terre et la Vie 107: 144-147.

Ridder, M. De (3). Un rotifère nouveau des nos eaux Saumatres. Biol. Jaarb. 28: 98-100 1 fig.

**Riedl,** R. (1). Über einige nordatlantische und mediterrane *Nemertoderma*-Funde. Zool. Anz. **165**: 232–248 7 figs.

Riedl, R. (2). Neue nordatlantische Formen von adriatischen Schlammböden. Zool. Anz. 165: 297–311 5 figs.

Rifaat, M. A. see Nagaty, H. F.

· Rigby, J. E. see Rawson, D.

Rimkute, M. see Vinickas, Z.

Ringuelet, R. A. Una colleción de Hirudineos del Peru. I Sanguinjuelas del lago Titicaca. Physis 21: 187-199 1 fig.

Rioja, E. Estudios anelidologicos. XXIII. Contribucion al conocimiento de los anelidos poliquetos de las Islas de Revillagigedo. An. Inst. biol. Mex. 30: 243-259 2 figs.

Ritter, M. see Le Berre, J. R.

Ritterson, A. L. Attempts to modify innate resistance of Chinese hamsters to *Trichinella spiralis*. J. Parasit. 46 5 Sect. 2: 22. [Abstract].

Roberts, L. S. Growth dynamics of *Hymenolepis diminuta* in the albino rat as affected by population density. J. Parasit. 46 5 Sect. 2: 11. [Abstract].

Robinson, D. L. H. Egg-laying by Schistosoma mansoni in vitro. Ann. trop. Med. Parasit. 54: 112-117 2 pls.

Robinson, E. J. Survival and developmental aberrations in Schistosoma mansoni following the administration of stilbestrol to the hosts. J. Helminth. 34: 81-84.

Robinson, H. A. & Olsen, O. W. The role of rats and mice in the transmission of the porkworm, *Trichinella spiralis* (Owens, 1835) Railliet, 1895. J. Parasit. 46: 509.507

Roche, J., Bessis, M. & Thiery, J. P. (1). Etude de l'hémoglobine d'Arenicola marina L. au microscope électronique. C.R. Soc. Biol. Paris 154: 73-76 5 pls.

Roche, J., Bessis, M. & Thiéry, J. P. (2). Etude du microscope électronique d'hémoglobines et de chlorocruorines d'Annélides. C.R. Soc. Biol. Paris 154: 949-952 2 figs.

Rodewald-Rudescu, L. Rädertierfauna Rumäniens. VI. Neue und bemerkenswerte Rädertiere aus Rumänien. Zool. Anz. 164: 450-468 15 figs.

Rodrigo, A. G. see Diaz-Ungria, C.

Rodrigues, B. A. see Pellegrino, J.

Rogers, W. P. The physiology of infective processes of nematode parasites; the stimulus from the animal host. Proc. roy. Soc. 152B: 367-386 11 figs.

Rogers, W. P. & Sommerville, R. I. The physiology of the second ecdysis of parasitic nematodes. Parasitology 50: 329-348 11 figs. 1 pl.

Rohde, Von K. Quantitative Infektion von weissen Ratten mit Eiern des Katzenbandwurmes (*Taenia taeniaeformis*) und deren Entwicklung zur Finne (*Cysticercus fasciolaris*). Tropenmed. & Parasit. Stuttgart 11: 43-50 2 figs.

Rohde, R. A. (1). Acetylcholinesterase in plantparasitic nematodes and an anticholinesterase from asparagus. Proc. helminth. Soc. Wash. 27: 121-123 1 fig.

Rohde, R. A. (2). The influence of carbon dioxide on respiration of certain plant-parasitic nematodes. Proc. helminth. Soc. Wash. 27: 160-164 3 figs.

Roitman, V. A. see Spassky, A. A.

Roman, E. (1). Sur la résistance à la réinfestation des rats parasites par le nématode Strongyloides ratti. C.R. Soc. Biol. Paris 153: 1795–1798.

Roman, E. (2). A propos de la classification des nematodes du groupe des Trichocéphales. Bull. Soc. zool. Fr. 84 1959 [1960]: 395–398.

Romanov, I. V. A new Capillaria species, Capillaria sibirica sp. n., from Eutamias sibiricus. Zool. Zh. 39: 766-768 2 figs. [English summary].

Romanova, N. N. Benthos distribution in central and southern Caspian. Zool. Zh. 39: 811-825 7 figs. [English summary].

Ronald, K. (1). The metazoan parasites of the Heterosomata of the Gulf of St. Lawrence. V. Monogenea. Canad. J. Zool. 38: 243-247.

Ronald, K. (2). The effects of physical stimuli on the larval stage of *Terranova decipiens* (Krabbe, 1878) (Nematoda: Anisakidae). Canad. J. Zool. 38: 623-642 12 figs.

Ronald, K. (3). The metazoan parasites of the Heterosomata of the Gulf of St. Lawrence. VI. Digenea, Canad. J. Zool. 38: 923-937 1 fig.

Root, R. B. An estimate of the intrinsic rate of natural increase in the planarian, Dugesia tigrina. Ecology 41: 369-372 1 fig.

Roots, B. I. & Phillips, R. R. Burrowing and the action of the pharynx of earthworms. Med. & biol. Illust. 10: 28-34 4 figs.

Rosé, F. see Capron, A.

Rosenberg, H., Rossiter, R. J., Gaffney, T. & Ennor, A. H. Lombricine phosphoryltransferase in earthworms. Biochim. & Biophys. Acta 37: 385–386 l fig.

Rocisky, B. Resultats des recherches faites par l'expedition parasitologique de l'Academie des Sciences Tchecoslovaque en Albanie. Česk. Parasit. 7: 5-16.

Rossiter, R. J. see Rosenberg, H.

Rothman, A. H. Ultramicroscopic evidences of absorptive function in cestodes. J. Parasit. 46 5 Sect. 2: 10. [Abstract].

Rothman, A. H. see Read, C. P.

Rothman, A. H. see Simmons, J. E.

Rothstein, N. & Brown, M. L. Vital staining and differentiation of microfilariae. Amer. J. vet. Res. 21: 1090-1094 5 figs.

Rothstein, N., Kinnamon, K. E., Brown, M. L. & Carithers, R. W. Canine microfilariasis in eastern United States. J. Parasit. 46 5 Sect. 2: 28. [Abstract].

Rowcliffe, S. A. & Ollerenshaw, C. B. Observations on the bionomics of the egg of Fasciola hepatica. Ann. trop. Med. Parasit. 54: 172–181 5 figs.

Rubin, R. see Eisa, A. M.

Ruffo, S. Present knowledge on the cave fauna of the Apulian region. Mem. Biogeogr. adriat. 3 1957: 1-143 12 figs. [Italian: English summary].

Rühm, W. Ein Beitrag zur Nomenklatur und Systematik einiger mit Scolytiden vergesellschafteter Nematodenarten. Zool. Anz. 164: 201-213 4 figs.

Rullier, F. (1). Développement de Salmacina dysteri (Huxley). Cah. Biol. mar. 1: 37-46 18 figs.

Rullier, F. (2). Sur deux Ancistrosyllis greenlandica McIntosh recuellis en Inde. Bull. Soc. zool. Fr. 85: 236-240 4 figs.

Rullier, F. (3). La caroncule chez les annelides polychètes. Mém. Soc. nat. Sci. Cherbourg 45 1952: 141-144.

Rullier, F. (4). Morphologie et développement du Spionidae (Annélide Polychète) Polydora (Boccardia) nedeki Horst. Cah. Biol. mar. 1: 231-243 31 figs.

Russell, C. R. An index to the Rotatoria of New Zealand and outlying islands from 1859-1959. Trans. roy. Soc. N.Z. 88: 443-461.

Russell, H. T., Jr. (1). Trematodes from shore-birds collected at Morro Bay, California. J. Parasit. 46 5 Sect. 2: 15. [Abstract].

Russell, H. T., Jr. (2). A method of handling small parasites during staining procedure. J. Parasit. 46: 723.

Rusticali, A. see Pasquini, P.

Rutter, A. E. H. Notes on some earthworms collected at East Malling Research Station. Trans. Kent Fld. Cl. 1 1957: 36-42.

Ruttner-Kolisko, A. Über die Populationen der Polyarthra dolichoptera Idelson (Rotatoria) in den Kapruner Staussen. Anz. öst. Akad. Wiss. 96 1959: 4-9 3 figs.

Rýsavý, B. (1). Der Entwicklungszyklus von Porrocaecum ensicaudatum Zeder, 1800 (Nematoda: Anisakidae). Acta Vet. hung. 9 1959: 317–323 4 figs.

Ryšavý, B. (2). K voprosu gelmintofauny ptic v Albanii. Česk. Parasit. 7: 197–210 11 figs. [German summary].

Ryšavý, B. (3). Příspěvek k poznání motolic cizopasících u ptáků v Československu. Česk. Parasit. 7: 271–283 12 figs. [German summary].

Ryšavý, B. & Dudek, J. Výsledky mikrobiologickéko a parasitologického vyše fováni dovázených opic z rodu *Macacus*. Česk. Parasit. **7**: 285–295 5 figs. [German summary].

Ryšavý, B. see Erhardová, B.

Sadikhov, I. A. The helminths of Arvicola terrestris in Azerbaidjan. Izv. Akad. Nauk. Azerbaid. S.S.R. (Biol.) 3: 77-79. [Russian summary]. Sadun, E. H. & Buck, A. A. Paragonimiasis in South Korea—Immunodiagnostic, epidemiologic, clinical, roentgenologic and therapeutic studies. Amer. J. Trop. Med. & Hyg. 9: 562-599 24 figs.

Sadun, E. H., Williams, J. S. & Anderson, R. I. Fluorescent Antibody Technic for Sero-diagnosis of Schistosomiasis of Humans. Proc. Soc. Exp. Biol. & Med. 105: 289-291.

Sadun, E. H. see Bruce, J. I.

Sadun, E. H. see Duxbury, R. E.

Sadun, E. H. see Moon, A. P.

Saint-Seine, R. de. Sur un cas de commensalisme d'une Annélide et d'un *Clypeaster* miocènes. Bull. Soc. géol. Fr. (6) 8 1959 : 581-584 1 pl.

Sakiyama, F. Rearing experiments of Urechis larvae. Bull. Mar. biol. Sta. Asamushi 10: 81-85 l fig.

Salfi, M. Umberto Pierantoni, 1876-1959. Arch. zool. ital. 44 1959 [1960]: i-xv 1 fig.

Samson, K. S. see Allen, R. W.

Sandars, D. F. Hydrophitrema gigantua, n. gen. n. sp. (Trematoda, Digenea) from Hydrophis elegans (Gray, 1842) from Australia. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 263–268 6 figs.

Sannemann, D. see Bischoff, G.

Santa, E. della see Baer, J. G.

Sanwal, K. C. (1). Taxonomic position of Macrolaimus papillatus (Rahm, 1928) Goodey, 1951, status of Diastolaimus Rahm, 1928, and emended diagnoses of Chambersiellidae and Chambersiella Cobb, 1920 (Nematoda). Canad. J. Zool. 38: 751-753.

Sanwal, K. C. (2). Panagrellus dubius n. sp. (Nematoda: Turbatricinae Goodey, 1943), from frass of beetle Sternochetus lapathı (L.), with remarks on redescriptions of Anguillula rediviva (L., 1767). Canad. J. Zool. 38: 1041–1046 5 figs.

Sanwal, K. C. (3). Macrolaimus canadensis n. sp. (Nematoda: Panagrolaiminae), from the frass of the bark beetle Phloeosimus canadensis Swaine, 1917, with remarks on other species of the genus Macrolaimus Maupas, 1900. Canad. J. Zool. 38: 1127-1131 7 figs.

Sarwar, M. M. (1). Notes on some trichurids. Biologia, Lahore 6: 140-162 9 figs.

Sarwar, M. M. (2). A note on the nematode parasites of birds. Biologia, Lahore 6: 257.

Sarwar, M. M. & Barya, M. A. Effect of small doses of phenothiazine on the development of larvae of Dictyocaulus filaria in sheep. Biologia, Lahore 6: 181-184

Sasaki, S. see Kurohagi, T.

Satchell, J. E. Earthworms and soil fertility. New Scient. 7: 79-81 fig.

Sathananthan, A. H. see Crusz, H. L.

Sawada, I. (1). Raillietina (Raillietina) tokyoensis n. sp. from a domestic pigeon, Columba livia domestica. Annot. zool. jap. 33: 57-60 3 figs.

Sawada, I. (2). Penetration glands in onchospheres of the chicken tapeworms, Raillietina echinobothrida and Raillietina kashiwarensis. Z. Parasit. 20: 350-354 5 figs.

Sawada, I. (3). Studies on the artificial hatching of onchospheres of the fowl tapeworm, Raillistina esticillus. Zool. Mag., Tokyo 69: 142-149 4 figs. [English summary].

Sayin, F. see Mimioglu, M.

Schad, G. A. The genus Thelandros (Nematoda: Oxyuroidea) in North American salamanders, including a description of Thelandros salamandras n. sp. Canad. J. Zool. 38: 115-120 17 figs.

Schad, G. A., Kuntz, R. E. & Wells, W. H. Nematode parasites from Turkish vertebrates. An annotated list. Canad. J. Zool. 38: 949-963 18 figs.

Schaeffler, W. F. Experimental infection of sheep with the dog ascarid, *Toxocara canis*. J. Parasit. 45 5 Sect. 2: 17. [Abstract].

Schaeffler, W. F. see Levine, N. D.

Schäller, G. Beitrag zum Problem der Keimzellenbildung bei Trematodenlarven. Z. Parasit. 20: 146– 151 1 fig.

Schell, S. C. A case of conjoined twin rediae. J. Parasit. 46: 448.

Schepens, D. Bijdrage tot de kennis van de Rotatoria van Belgie. Biol. Jaarb. 28: 88-97 6 figs.

Schiller, E. L. The histogenesis of cuticle in the cestode genus *Taenia*. J. Parasit. 46 5 Sect. 2: 9-10. [Abstract].

Schleicher, L. Grabspuren aus den nichtmarinen Schichten der Bochumer Schichten (Fettkohlenschichten) Westfalens. N. Jb. Geol. Paläont. **B.6** 1954: 274-234 text-figs. 1-7.

Schmidt, W. & Teichmüller, M. Neue funde von Sphenothallus auf dem westeuropäischen Festland, insbesondere in Belgien, und ergänzende Beobachtungen zur Gattung Sphenothallus. Publ. Ass. Étud. Palæont. 33 1958: 1–34 6 pls.

Schott, G. Über einen Fund von Hepatotaenia festiva (Rudolphi 1819) in den Gallengängen von einem roten Riesenkänguruh (Macropus rufus Desm.). Z. Parasit. 20: 157–160 5 figs.

Schwan, W. Zur Neugliederung der Acker-Bruchbergschichten nach Conodonten Speziell bei Harzburg. Geologie 7 1958: 991-1017.

Schräder, T. Zur Limnologie und Abwasserbiologie von Talsperren, obere Saale (Thüringen). Int. Rev. ges. Hydrobiol. 44 1959: 485–619 41 figs.

Schreiber, K. see Sembdner, G.

Schriel, W. & Stoppel, D. Die Einstufung des Tanner Grauwackensystems im Harz auf Grund von Conodonten. Z. dtsch. geol. Ges. 111: 662-683.

Schroeder, R. see Lenhoff, H. M.

Schwartz, L. H. see Zimmermann, W. J.

Sciacchitano, I. (1). Contributo alla conoscenza degli irudinei del Congo Belga. Rev. Zool. Bot. afr. 61: 287-309 16 figs.

Sciacchitano, I. (2). Sangsues de l'Afghanistan. Contribution à l'étude de la faune d'Afghanistan No. 24. in Libro homenaje al Dr. Eduardo Caballero y Caballero 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional) : 533–541.

Schwartz, B. Discovery of Trichinae and determination of their life history and pathogenicity. Proc. helminth. Soc. Wash. 27: 261-268.

Schwegler, H. W. Strudelwürmer. Mikroskosmos 49: 144-148 4 figs.

Scott, A. J. & Collinson, C. Intraspecific variability in conodonts: Palmatolepis glabra Ulrich & Bassler. J. Paleont. 33 1959: 550-565 2 pls. figs.

Scott, A. J. see Collinson, C.

Scott, D. An epidemiological note on guinea-worm infection in north-west Ashanti, Ghana. Ann. trop. Med. Parasit. 54: 32-43 5 figs.

Scott, J. A. A description of certain details of growth and development of the filarial worms of cotton rats and the value of these observations in the study of immunity. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 501–510 7 figs.

Scott, J. A. see Cross, J. H.

Seamster, A. A new species of Dactylog yrus from the silver chub. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 269–270 3 figs.

Segarra, J. M. see Jones, A. W.

**Seilacher,** A. An-aktualistisches Wattenmeer? Paläont. Z. **31** 1957: 198-206 2 pls. figs.

Seilern-Aspang, F. (1). Beobachtungen über Zellwanderungen bei Trikladengewebe in der Gewebekultur. Roux Arch. Entw. Mech. Organ. 152: 35–42 4 figs.

Seilern-Aspang, F. (2). Experimentelle Beiträge zur Frage der Zusammenhänge: Regenerationsfähigkeit—Geschwulstbildung. Roux Arch. Entw. Mech. Organ. 152: 491–516 23 figs.

Seilern-Aspang, F. (3). Syncytiale und differenzierte Tumoren bei Tricladen. Roux Arch. Entw. Mech. Organ. 152: 517–523 5 figs.

Seinhorst, J. W. see Goodey, J. B.

Semal-Van Gansen, P., Vandermeerssche, G. & Castiaux, P. Ultrastructure des cellules non caligènes des glandes calciques d'Eisma foetida (Savigny). Bull. Micr. appl. (2) 10: 33–37 6 pls.

Sembdner, G. & Schreiber, K. Über die schlüpfaktive bzw. schlüpfhemmende Wirkung der Wurzeldffusate verschiedener Pflanzen auf den Kartoffelnematoden, Heterodera rostochiensis Woll. 2. Mit\*. über Heterodera-Arten. Nematologica Suppl. II: 127–140 2 figs.

Sen, H. G. & Kelley, G. W., Jr. Attempts at axenic culture of lungworms of swine. J. Parasit. 46 5 Sect. 2: 24. [Abstract].

Sengel, C. Culture in vitro de blastème de régénération de Planaires. J. Embryol. exp. Morph. 8: 468-476 5 figs.

Serafimova-Hadzišče, J. Particularités du zooplancton du Lac de Prespa et aperçu de la composition du zooplancton des grands lecs de la Péninsule des Balkans. Rec. Trav. Sta. Hidrobiol. Ohrid 6 12 (28) 1958: 1–8.

Serra, J. A. & Picciochi, P. G. C. Demonstration of canonic gonial mitoeis and meiosis in *Parascaris equorum*. Science 132: 1400-1401 l fig.

Serre, B. & Lys, M. Repartition de quelques conodontes dans le Dévonien et le Carbonifère inferieur de France et de Belgique. Rep. 21st Internat. Geol. Cong. 6: 35-40.

Serre, B. see Lys, M.

Shafer, T. see Golden, A. M.

Sharma, M. L. see Etges, F. J.

Sheffield, H. G. see Worley, D. E.

Shepherd, A. M. A study of the apparent decay of eggs within cysts of *Heterodera schachtii* Schmidt and *H. gottingiana* Liebscher, and of free larvae in soil. Nematologica 5: 103-110 6 figs.

Shevchenko, N. N. & Vergin, G. I. A determination of the life cycle of the trematode Astiotrema monticelli Stossich 1904. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 130: 137-139 1 fig. Dokl. Akad. Nauk S.S.S.R. 130: 949-952 1 fig.

Shol, V. A. (1). On the natural infection of opisthorchiasis. Trud. Inst. Zool. Alma-Ata 14: 61-63. [In Russian].

Shol, V. A. (2). Coenurosis in pig. Trud. Inst. Zool. Alma-Ata 14: 180-190 fig. [In Russian].

Shorb, D. A. see Gardiner, J. L.

Short, R. B. & Menzel, M. Y. Chromosomes of nine species of schistosomes. J. Parasit. 46: 273-287 4 pls.

Short, R. B. see Menzel, M. Y.

Shrivastava, S. C. see Lal, M. B.

Shtein, G. A. The life-cycle and habitat conditions of the nematode *Rhabdochona denudata* (Dujardin, 1845). Dokl. Akad. Nauk. S.S.S.R. (Transl.) Biol. Sci. 127 1959: 703-704 für.

Shultz, R. S. & Andreeva, N. K. On the immunity of mice to Strobilocercosis in connection with age. Trud. Inst. Zool. Alma-Ata 12: 104-108. [In Russian].

Shumard, R. F. & Hendrix, J. C. Studies on the efficacy of dithiazanine iodide against migrating Ascaris suum larvae in pigs. J. Parasit. 46 5 Sect. 2: 9. [Abstract].

Shuster, C. N., Jr. On the ecology of estuarine zooparasites. Trans. N.Y. Acad. Sci. (2) 23: 133-137.

Siddiqi, A. H. (1). Studies on the morphology of Cotugnia digonopora Pasquale 1890 (Cestoda: Davaineidae). Part I. Z. Parasit. 20: 368-380 7 figs.

Siddiqi, A. H. (2). On a new unisexual cestode, Neodioecocestus cablei n. g., n. sp., from the little grebe, Podiceps ruficollis. Z. Parasit. 20: 381-384 3 figs.

Siddiqi, M. R. (1). Two new species of the genus Trichodorus (Nematoda: Dorylaimoidea) from India. Proc. helminth. Soc. Wash. 27: 22-27 2 figs.

Siddiqi, M. R. (2). Telotylenchus, a new nematode genus from North India (Tylenchida: Telotylenchinae n. sub-fam.). Nematologica 5: 73-77 l fis.

Sidorov, E. G. (1). Parasites of fish in the waterreservoirs of Central Kazakhstan. Trud. Inst. Zool. Alma-Ata 14: 88-127. [In Russian].

Sidorov, E. G. (2). Distribution of metacercariae of Opisthorchis felineus in fishes of Irtish in the territory of Pavlodarsk Province. Trud. Inst. Zool. Alma-Ata 12: 192-194. [In Russian].

Sieber, R. Die Tortonfauna von Steinabrunn bei Drasenhofen (Bez. Mistelbach, N-Ö). Verh. Geol. Reichs Anst. (St. Anst) Wien 1958: 142-155.

Silva, J. A. A. Oc. see Pires, F. M.

Simmons, J. E., Jr., Read, C. P. & Rothman, A. H. Permeation and membrane transport in animal parasites: permeation of urea into cestodes from elasmobranchs. J. Parasit. 46: 43-50 2 pls.

Simmons, J. E. see Read, C. P.

Simoes Barbosa, F. A. Host parasite relationships between the larval stages of the trematode Schistosoma mansoni and the snail host Australorbis glabratus. Bol. Fund. G. Moniz No. 15: 1-44. [English summary].

Singh, K. P. & Singh, K. S. Two new species of avian cestodes of the genus *Panuwa* Burt, 1940 from India. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico D.F. (Instituto Politecnico Nacional): 407–413 8 figs.

Singh, R. N. (1). Two new species of Strigeid cercariae from northern India. Proc. Nat. Acad. Sci. India 25 (B) 1955: 15-22 5 figs.

**Singh**, R. N. (2). Studies on a new species of schistosome cercaria from *Lymnaea luteola* f. australis. Proc. Nat. Acad. Sci. India 25 (B), 1955: 23-28 2 figs.

Singh, R. N. (3). Further observations on the miracidium of *Schistosoma spindalis* Montgomery, 1906. Proc. Nat. Acad. Sci. India 25 (B), 1955: 29-36 3 figs.

Singh, R. N. (4). Further studies on strigeid cercariae from Allahabad. Proc. Nat. Acad. Sci. India 25 (B) 1955: 37-45 4 figs.

Singh, R. N. (5). A new Strigeid cercaria from Lymnasa luteola. Proc. Nat. Acad. Sci. India 26 (B) 1956: 239-242 2 figs.

Singh, R. N. (6). Studies on a new Strigeid metacercaria parasitic in cyprinoid fishes. Proc. Nat. Acad. Sci. India 26 (B) 1956: 255-263 7 figs.

Singh, R. N. (7). Studies on the morphology and life history of Schistosoma indicum Montgomery, 1906. J. Univ. Sauger 7 1958: 42-62 12 figs.

Singh, R. N. (8). Studies on the morphology and life history of Clinostomum pissidium Southwell and Prashad, 1918 (Trematoda: Clinostomatidae). Proc. Nat. Acad. Sci. India 29 (B) 1959: 12-33 11 figs.

Singh, R. N. (9). Seasonal infestation of *Inde*planorbis exustus (Deshayes) with furcocercous cercariae. Proc. Nat. Acad. Sci. India 29 (B) 1959: 62-72.

Singh, S. see Gupta, N. K.

Sinha, P. K. (1). Raillietina dattai n. sp. from poultry (Gallus gallus domesticus) in India. J. Parasit. 46: 485-486 3 figs.

Sinha, P. K. (2). Syphacia srivastavi n. sp. from domestic pig in India. J. Parasit, 46: 505-508 table 1 pl.

Sinha, P. K. & Srivastava, H. D. Studies on Schistosoma incognitum Chandler, 1926. II. On the life history of the blood fluke. J. Parasit. 46: 629-641 2 pls.

Sinzar, D. S. Artenliste der Acanthocephalen-Sammlung im Zoologischen Staatsinstitut und Zoologischen Museum, Hamburg. Mitt. hamburg. zool. Mus. 57 1959: 31-35.

s'Jacob, J. J. Der Einfluss einiger Gewächse auf die Population von *Meloidogyne hapla*. Nematologica Supp. II: 141-143 2 figs.

Skrjabin, K. I. & Guschanskaja, L. H. On the identity of the genera Tricotyledonia Fyfe, 1954 and Grassitrema Yeh, 1954, and a new subfamily Grassitrematinae n. subfam. (Trematoda: Hemiurata). in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 271–274 2 figs.

Sládeček, V., Fizla, L. & Sládečková, A. Limnologische Forshungen am Stausee Pastviny mit besonderer Berücksichtigung des Einflusses eines Kraftwerkes. Sborn. Vys. Skol. Chem.-Tech. Praze. Odd. Fac. tech. paliv a vody 3 1959: 431–495 6 pls. 89 figs.

Sládečková, A. Limnological studies of the reservoir Sedlice near Zelw. XI. Periphyton stratification during the first year-long period (June 1957-July 1958). Sborn. Vys. Skol. Chem.-Tech. Praze 4: 143-261 46 figs. Sládečková, A. see Sládeček, V.

Smith, E. H. On a new polyclad commensal of prosobranchs. An. Acad. bras. Cienc. 32: 385-390 4 figs.

Smith, W. L., Jr. see Dropkin, V. H.

Smythies, B. E. Leeches of Borneo. Sarawak Mus. J. n.s. 9: 279-294 4 figs.

Sobrero, R. Animali domestici ospiti naturali di Schistosoma bovis in Somalia. Riv. Parassit. 21: 125-130 1 fig.

Sogandares-Bernal, F. & Bridgman, J. F. Three Assocityle complex trematodes (Heterophyidae) encysted in fishes from Louisiana, including the description of a new genus. Tulane Stud. Zool. 8: 31–39 8 figs.

Sogandares-Bernal, F. & Hutton, R. F. (1). Notes on the probable partial life-history of Galactosomum spinetum (Braun, 1901) (Trematoda) from the west coast of Florida. Proc. helminth. Soc. Wash. 27: 75-774 figs.

Sogandares-Bernal, F. & Hutton, R. F. (2). The status of some marine species of Lepocradium Stossich, 1904 (Trematoda: Lepocreadiidae) from the North American Atlantic. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 275–283 15 figs.

Sogandares-Bernal, F. see Hutton, R. F.

Sokolova, I. B. & Panin, V. Y. On intermediate hosts of *Moniezia, Thysaniezia* and *Avitellina* in Kazakhstan. Trud. Inst. Zool. Alma-Ata 12: 145–149. [In Russian].

Solberg, B. see Dougherty, E. C.

Soliman, K. N. Morphological study on *Dictyocaulus amfieldi* (Cobbold, 1884) Railliet and Herry, 1907, from a donkey in Egypt. Brit. vet. J. 116: 191-195 4 pls.

Solovyev, G. V. see Gagarin, V. G.

Sommerville, R. I. The growth of Cooperia curticei (Giles, 1892), a nematode parasite of sheep. Parasitology 50: 261-267 2 figs.

Sommerville, R. I. see Rogers, W. P.

Sonin, M. J. see Spassky, A. A.

Soto, L. B. Estudios histológicos en piel y oncocercomas de oncocercoses. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 443-450.

Sparks, A. K. Some aspects of the zoogeography of the digenetic trematodes of shallow-water Fishes of the Gulf of Mexico. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 285–298.

Sparks, A. K. & Thatcher, V. E. A new species of Crassicutis (Trematoda, Allocreadiidae) from a sparid fish (Archosargus probatocephalus) in the northern Gulf of Mexico. Trans. Amer. micr. Soc. 79: 341-342.

**Spasskaya,** L. P. Ökologische Analyse der Bandwurm-Fauna von Vögeln der A.S.S.R. Komi. Acta Vet. hung. **8** 1958: 173–185 11 figs. [Russian with German summary].

[Spasskaya, L. P. & Kopaev, Y. N. Morphological adaptation of the eggs of tapeworms]. Acta Vet. hung. 9 1959: 393–398 6 figs.

Spasskaja, L. P. & Spasskij, A. A. K faune cestod ptic Jakutů (soobščenije III-je). Česk. Parasit. 7: 313–341 13 figs.

Spasskij, A. A. Obzor zoologičeskoj sistemy cepnej (Cestoda: Cyclophyllidea). Česk. Parasit. 7: 309-311.

Spassky, A. A. & Roitman, V. A. Fauna of Trematodes, cestods and Acanthocephala of the Upper Enisey fishes. Ichthyol. Problems 15: 183-192.

Spassky, A. A. & Sonin, M. J. Ornithofilaria twensis sp. n., a new filaria from the subcutaneous tissue of gallinaceous birds. Acta Vet. hung. 8 1958: 305-318 8 fos.

Spasskij, A. A. see Spasskaja, L. P.

Spindel, W. see Gross, P. R.

Sprau, F. Über ein vermutlich pflanzenschädigendes Auftreten eines freilebenden Nematoden, Longidorus maximus (Bütschli) an einer Reihe von Kulturpflanzen. Nematologica Suppl. II: 49-55 2 pls.

Sprent, J. F. A. & Mines, J. J. A new species of Amplicaecum (Nematoda) from the carpet snake (Morelia argus variegatus): with a redefinition and a key for the genus. Parasitology 50: 183-198 20 figs.

Srivastava, H. D. see Sinha, P. K.

Srivastava, J. S. see Pande, B. P.

Stagni, A. see Vannini, E.

Stam, A. B. Un cas mortel d'ascaridiose (Ascaris lumbricoides L.) chez le chimpanzé nain (Pan paniscus Schwartz). Ann. Parasit. hum. comp. 35: 675.

Stanley, E. A. Some Mississippian Conodonts from the High Resistivity Shale of the Nancy Weston No. 1 well in Northeastern Mississippi. J. Paleont. 32 1958: 459-476 6 pls. figs.

Stauber, L. A. A goal for parasitologists. Proc. helminth. Soc. Washington 27: 227-231.

Stebayev, I. V. Soil invertebrates of Salikhard tundra and changes of their groups under the influence of agriculture. Zool. Zh. 38 1959: 1559-1572. [English summary].

Stegman, LeR. C. A preliminary survey of earthworms of the Tully forest in central New York. Ecology 41: 779-782.

Stelter, H. & Raeuber, A. Untersuchungen über den Kartoffelnematoden (*Heterodera rostochiensis* Wollenseber). VII. Weitere Untersuchungen über die Veranderung einer Nematodenpopulation unter den Einfluss widerstandsfähiger und anfälliger Kartoffelvarietäten in Topfversuchen. Biol. Zbl. 79: 455–463 6 figs.

**Stemerding**, S. The influence of different rotations on a population of pea cyst eclworm, *Heterodera gottingiana* Liebscher. Nematologica Suppl. II pp. 97–100.

Stépánek, M. & Červenková, E. Limnological study of the reservoir Sedlice near Zeliv. VIII. The horizontal distribution of zooplankton in different sections of the reservoir (Protozoa, Rotatoria, Crustacea). Sb. Vys. Skol. Chem.-Tech. Praze. Odd. Fac. tech. paliv a vody 3 1959: 317–362 21 figs. [English summary].

Stéphan-Dubois, F. (1). Potassium et régénération caudale de *Nereis diversicolor* (Annélide Polychète). C.R. Soc. Biol. Paris 153: 1590-1594 2 figs.

Stéphan-Dubois, F. (2). Le chlorure de magnésium dans la régénération postérieure de *Mereis* diversicolor (Annélide Polychète)! C.R. Soc. Biol. Paris 153: 1852-1856 2 figs.

Stéphan-Dubois, F. & Kolmayer, S. La migration et la différenciation des cellules de régénération chez la Planaire Dendrocoelum lacteum. C.R. Soc. Biol. Paris 153: 1856-1858 2 figs.

Stéphan-Dubois, F. see Kolmayer, S.

Steshenko, V. M. see Gagarin, V. G.

Stevens, A. J. see Thomas, R. J.

Stirewalt, M. A. Change in schistosome larvae and in mouse host skin during migration of the parasites. J. Parasit. 46 5 Sect. 2: 21. [Abstract].

Stone, G. L. & Furnish, W. M. Bighorn conodonts from Wyoming. J. Paleont. 33 1959: 211-228 2 pls.

Stone, L. E. W. Field experiments on cereal root eelworm. Ann. Appl. Biol. 48: 681-686.

Stoppel, D. see Bischoff, G.

Stoppel, D. see Schriel, W.

Stransky, E. & Lorenzo, A. S. On raillietiniasis in the Philippines. Acta Trop., Basel 17: 80-84.

Streeter, D. T. Some notes on the distribution of the Turbellaria-Tricladida in the Cranbrook district. Trans. Kent Fld. Cl. 1 1957: 43-46.

Strelkow, J. A. Endoparasitic worms of marine fishes of East Kamchatka. Tray, Inst. zool. Acad. Sci. U.R.S.S. 28: 147–196 4 figs. [English summary].

Strelkow, J. A. see Gussev, A. V.

Stretch, R. G. A., Stretch, S. J. E., Leytham, G. W. H. & Kershaw, W. E. The effect of schistosomiasis upon discrimination learning and activity in mice. I. An acute infection. Ann. trop. Med. Parasit. 54: 376-380 2 figs.

Stretch, S. J. E. see Stretch, R. G. A.

Streu, H. T. see Hutchinson, M. J.

Stumm, E. C. & Wright, J. D. Check list of fossil invertebrates described from the Middle Devonian rocks of the Thedford-Arkona region of Southwestern Ontario. Contr. Mus. Paleont. Univ. Mich. 14 1958: 81-132.

Stunkard, H. W. (1). Problems of generic and specific determination in digenetic trematodes with special reference to the genus *Microphallus* Ward, 1901. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 299–309.

Stunkard, H. W. (2). Studies on the morphology and life-history of Notocotylus minutus n. sp., a digenetic trematode from ducks. J. Parasit. 46: 803-809 l pl.

Styczynska-Jurewicz, E. Expansion of cercarial of Diplostomum spathaceum Rud. 1819, a common parasite of fishes, in the littoral zone of the lake. Polsk. Arch. Hydrobiol. 6 1959: 105-116 8 figs.

Suárez-Caabro, J. A. & Madruga, J. E. The Chaetognatha of the northeastern coast of Honduras, Central America. Bull. mar. Sci. Gulf & Caribbean 10: 421-429 3 figs.

Suguro, T. see Yokogawa, M.

Sulgostowska, T. (1). Intestinal trematodes of birds of mesotrophic lakes: Goldapiwo and Manry Północne. Acta Parasit. polon. 8: 86-114 3 figs.

Sulgostowska, T. (2). Extra-intestinal trematodes in birds of the mesotrophic lakes: Goldapiwo and Mamry Północne. Acta Parasit. polon. 8: 471–492 4 figs.

**Sveshnikov**, V. A. Pelagic larvae of some polychaeta in the White Sea. Zool. Zh. **39**: 343–355 4 figs. [English summary].

Swanson, G. A., Erickson, H. R. & Mackiewicz, J. S. Swimmers' itch in farm ponds in New York State. New York Fish & Game J. 7: 77-79.

Swarup, H. Parasitic infection in Gasterosteus aculeatus (L.) reared in the laboratory aquaria. J. Univ. Saugar 7 1958: 93-95 3 figs.

Sweet, W. C., Turco, C. A., Warner, E. & Wilkle, L. C. The American Upper Ordovician standard. 1. Eden conodonts from the Cincinnati region of Ohio and Kentucky. J. Paleont. 33 1959: 1029-1068 4 pls. fig.

Sweet, W. C. see Pulse, R. R.

Sylvester, R. K. Scolecodonts from Central Missouri. J. Paleont. 33 1959: 33-49 2 pls. figs.

Symes, C. B. A note on *Dirofilaria immitis* and its vectos in Fiji. J. Helminth. 34: 39-42 6 figs.

Symons, L. E. A. Pathology of infestation of the rat with Nippostrongylus muris (Yokogawa). II. Chemical constituents of the jejunum and dry weight of the rumen. III. Jejunal flukes in vivo of water, sodium, and chloride. IV. The absorption of glucose and histidine. V. Protein digestion. Aust. J. biol. Sci. 13: 163-187, 578-583.

Syni Sho-Tai, & Boev, S. N. On the lung nematodes of sheep in the Gansu Province in China. Trud. Inst. Zool. Alma-Ata 12: 109-114 6 figs. [In Russian].

Sytinski, I. A. see Vereshchagin, S. M.

Szanto, J. see Levine, N. D.

Szidat, L. La parasitología como Ciencia auxiliar para develar problemas hidrobiológicos, zoogeográficos y geofísicos del Atlántico Sud. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 577–594.

Szidat, L. & Czibulinski de Szidat, U. Eine neue, Dermatitis erzeugende Cercarie der Trematoden-Familie Schistosomidae aus Tropicorbis peregrinus (D'Orbigny) des Rio Quequén. Z. Parasit. 20: 359–367 9 figs.

Taffs, L. F. Immunization of guineapigs against Ascaris suum. J. Helminth. 34: 347-348.

Tampi, P. R. S. (1). The ecological and fisheries characteristics of a salt water lagoon near Mandapam. J. mar. biol. Ass. India 1: 113-130 2 figs.

Tampi, P. R. S. (2). An ingenious method of collecting polychaete worms for fish bait. J. mar. biol. Ass. India 1: 250-251.

Tandon, R. S. (1). Development and morphology of the miracidium of Paramphistomum gotoi Fukui, 1926, an amphistome (Trematoda) from the rumen of cattle in India. Annot. zool. jap. 33: 178–183 13 figs.

Tandon, R. S. (2). Studies on the lymphatic system of amphistomes of ruminants: 1. Carmyerius spatiosus (Stiles & Goldberger, 1910); 2. The genera Gastrothylax and Fischoederius. Zool. Anz. 164: 213-217 fig.; 217-221 figs.

Tani, T. see Morishita, K.

Tasch, P. Significance of conodont control of pellet formation in the basal Maquoketa. Micropaleontology 4 1958: 187-191 figs.

Tatge, U. Conodonten aus dem germanischen Muschelkalk. 1-11 Teil. Paläont. Z. 30 1-2 1956: 108-127 2 pls. fig. and 30 3-4 1956: 129-147.

Tauji, M. see Yokogawa, M.

Taylor, A. E. R. (1). The spermatogenesis and embryology of *Litomosoides carinii* and *Dirofilaria immitis*. J. Helminth. 34: 3-12 1 fig. 4 pls.

Taylor, A. E. R. (2). Studies on the microfilariae of Loa loa, Wuchereria bancrofti, Brugia malayi, Dirofilaria immitis, D. repens and D. aethiops. J. Helminth. 34: 13-26 7 figs. 2 pls.

Taylor, A. E. R. (3). The development of *Dirofilaria immitis* in the mosquito *Aedes aegypti*. J. Helminth. 34: 27–38 7 figs. 1 pl.

Taylor, A. E. R., Ball, G. H. & Voge, M. Studies on the axenic culture of the rodent tape-worms, Hymenolepis diminuta and H. nana. J. Parasit. 46 5 Sect. 2: 11. [Abstract].

Teichmüller, M. see Schmidt, W.

Teixeira de Freitas, J. F. (1). Estudos sôbre Schrankianidae fam. nov. (Nematoda, Subuluroidea). Arq. Mus. Nac. Rio de Janeiro 1959 49: 9-67 77 figs.

Teixeira de Freitas, J. F. (2). Nota sôbre Tanaisia inopina Freitas, 1951 (Trematoda, Eucotylidae). Atas Soc. Biol. Rio Jan. 3 6 1959: 2-4 fig.

Teixeira de Freitas, J. F. (3). Rápidas informaçoes sôbre hospedadores e distribução geográfica de alguns trematódeos parasitos de batráquios. Atas Soc. Biol. Rio Jan. 4: 29-32.

Teixeira de Freitas, J. F. (4). Edcaballerotrema eduardocaballeroi g. n. sp. n. e nota sobre o hospedador tipo de Ochoterenatrema caballeroi Freitas, 1957 (Trematoda, Lecithodendriidae). in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 129–132 fig.

Teixeira de Freitas, T. F. (5). Sobre um novo parasito de anfibio: "Maicuru solitarium" g. n., sp. n. (Trematoda Plagiorchidae). Bol. Mus. Para. Emílio Goeldi 30: 1-4 fig.

Teixeira de Freitas, J. F. (6). Sôbre uma nova espécie do gênero "Prosthodendrium" Dollfus, 1931. (Trematoda, Lecithodendriidae). Rev. bras. Biol. 20: 265-268 figs.

Teixeira de Freitas, J. F. & Dobbin, J. E., Jr. (1). Telorchis diaphanus sp. n., tremátodes parasito de quelónio. An. Soc. biol. Pernambuco 16 1959: 191–199 4 pls.

Teixeira de Freitas, J. F. & Dobbin, J. E., Jr. (2). Nova espécie do gênero Parapharyndogon Chatterji 1933 (Nematoda, Oxyuroidea). An. Soc. biol. Pernambuco 16 1959: 23–33 3 pls.

Teixeira de Freitas, J. F. & Jorge da Silva, A. A. Alguns nematódeos parasitoses de Gallus gallus Dom. (L.) no estado da Bahia. Mem. Inst. O Cruz 58: 189-207 31 figs.

Teixeira de Freitas, J. F. & Machado de Mendonça, J. (1). Novo nematódeo parasite de Procyon cancrisorus Cuv.: Pearsonema pearsoni gen. nov., sp. nov. (Trichuroidea, Capillariidae). Atas Soc. Biol. Rio Jan. 4: 63-66 10 figs.

Teixieira de Freitas, J. F. & Machado de Mendonça, J. (2). Nota previa sôbre nova Capillaria parasita de jandaia (Nematoda, Trichuroidea). Atas Soc. Biol. Rio Jan. 3: 2-3.

Teixeira de Freitas, J. F. & Machado de Mendonça, J. (3). Novo gênero de "Graphidimae" Travasos, 1937 (Nematoda, Strongyloidea). Rev. bras. Biol. 19: 387-392.

Teixeira de Freitas, J. F. & Machado de Mendonça, J. (4). Novo nematódeo do gênero Pterothominx Freitas, 1959 (Trichuroidea, Capillariidae). Rev. bras. Biol. 20: 269-272 9 figs.

Teixeira de Freitas, J. F. & Machado de Mendonça, J. (5). Novo nematódeo tricostrongilideo parasto de quiróptero. Bol. Mus. Para. Emilio Goeldi. 29: 1-4 8 figs.

Tembe, V. B & Dubashi, P. J. A preliminary note on the culture and development of Indian earthworms. J. Bombay nat. Hist. Soc. 56: 643-646 fig.

Tendeiro, J. Sur une nouvelle espèce de trématode monogénétique, Microcotyle eduardoi n. sp. (Diclidophoroidea, Microcotylidae), parasite du Pomadasys suillus (Cuvier et Valenciennes) (Pisces, Teleostei). in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 311–314 2 pls.

Tendeiro, J. Sur une nouvelle espèce de trématode monogénétique, Microcotyle eduardi, n. sp. (Diclidophoroidea, Microcotylidae), parasite du Pomadasys suillus (Cuvier et Valenciennes) (Pisces, Teleostei). in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 311–314 2 pls.

Tenors, F. (1). Revision of the classification of plathelminths of the family Catenotaeniidae Spassky 1950. Zool. Zh. 38 1959: 1322-1334 9 figs.

Tenora, F. (2). Ganguleterakis micropis sp. n. (Heterakidae, Nematoda), eine neue Art bei Mäusen der Gattung Apodemus schmarotzender Nematoden. Zool. Anz. 164: 469-473 13 figs.

Tenora, F. & Baruš, V. Nové poznatky o tasemnicích netopýru (Microchiroptera) v Č.S.R. Česk. Parasit. 7: 343-349 4 figs. [German summary].

Terio, B. Si un pigmento fluorescente presente nella pinna del remo dorsale di un anellide polichete (*Tomopteris septemtrionalis* Steenstrup). Boll. Soc. ital. Biol. sper. 36: 725-727 2 figs.

Termier, H. & Termier, G. Paléontologie stratigraphique: 1-515 figs. Paris.

Teshirogi, W. & Yamada, M. On the frequencies of genital organ-formation in the transverse cut-pieces of a planarian, *Bdellocephala brunnea* cultured under various conditions. Zool. Mag., Tokyo 69: 209-215. [English summary].

**Thapar,** G. S. A new genus of amphistomatous parasite from the intestine of a fish, Curhina fulungel, from India. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 315–320 fig.

Thatcher, V. E. see Sparks, A. K.

Theodoridés, J. Parasites et phorétiques de coléoptères et de myriapodes de Richelieu (Indre-et-Loire). Ann. Parasit. hum. comp. 35: 488-503 4 figs.

Thermes, G. Derivazione di elementi nervosi da cellule di natura mesodermica nella rigenerazione del cordone nervoso dei Lombricidi (Allopobophora caliginosa ed Allobophora rosea). R.C. Accad. Lincei (8) 29: 145-149 2 pls.

Thiéry, J. P. see Roche, J.

Thomas, G. A. The lower Carboniferous Laurel Formation of the Fitzroy Basin. Rep. Aust. Bur. Min. Res. geol. geophys. 38 1959: 21-36 l pl. figs.

Thomas, J. D. Trematodes of Ghanian sub-littoral fishes. II. The family Lepocreadiidae Nicoll, 1935, sensu Cable and Hunninen, 1942. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 321–328 5 figs.

Thomas, L. J. see Babero, B. B.

**Thomas**, R. J. & **Stevens**, A. J. Ecological studies on the development of the pasture stages of *Nematodirus* battus and *N. filicollis* nematode parasites of sheep. Parasitology **50**: 31-49 5 figs.

Thompson, D. E. see Enzie, F. D.

Thompson, P. E. see Meisenhelder, J. E.

Thouveny, Y. Origine des cellules nerveuses dans la régénération de l'annélide *Polydora flava* (Clap.). Bull. Soc. 200l. Fr. **84** 1959 [1960]: 439-445 7 figs.

Timofeeva-Resovskaya, E. A. see Getsova, A. B.

Timm, R. W. (1). A new species of Leptosomatum (Nematoda) from the Arabian Sea. J. Helminth. 34: 217-220 1 fig.

Timm, R. W. (2). Brevibucca punctata, n. sp. and Macrolaimus natator, n. sp., new soil nematodes from East Pakistan. Biologia, Lahore 6: 252-256 l fig.

Timm, R. W. (3). The widespread occurrence of the hemizonid. Nematologica 5: 150 1 fig.

Timm, R. W. (4). Paraseinura (Nematoda: Aphelen-choididae), a new genus from east Pakistan. Nematologica 5: 171-174 1 fig.

Timm, R. W. (5). The genus Perodira Baylis, 1943 (Nematoda: Drilonematidae), with a description of a new species. Proc. helminth. Soc. Wash. 27: 77-80 1 fig.

Timon-David, J. (1). Etude de deux métacercaires parasites des Amphipodes du genre Gammarus. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930-1960. Mexico, D.F. (Instituto Politecnico Nacional): 329-336 7 figs.

Timon-David, J. (2). Recherches expérimentales sur le cycle de *Dicrocoelioides petiolatum* (A. Raillet 1900) (Trematoda, Dicrocoeliidae). Ann. Parasit. hum. comp. 35: 251-267 16 figs.

Tobie, B. E. & Beye, H. K. Fluorescence of tetracyclines in filarial worms. Proc. Soc. exp. Biol. Med. 104: 137-140 3 figs.

Tokioka, T. (1). Observations on the taxonomy and distribution of chaetognaths of the Pacific. Publ. Seto mar. biol. Lab. 7 1959: 349-354 35 figs.

Tokioka, T. (2). Droplets from the plankton net. XIX. A glimpse upon chaetognaths and pelagic tunicates collected in the lagoon water near Noumea, New Caledonia. Publ. Seto mar. biol. Lab. 8: 51-53.

Tokobaev, M. M. Helminths of some species of Microtinae in Kirgizia. Izv. Akad. Nauk. Kirgiz. S.S.R. (Biol.) 1 1959: 159-167. [In Russian].

Torbert, B. J. see Mayhew, R. L.

Torii, H. A consideration of the distribution of some troglobionts of Japanese caves. Jap. J. Zool. 12: 555-584.

Trautman, R. J. see Dewhirst, L. W.

Trautwein, H. & Wittekindt, H. Ein Devon-Karbon-Profil bei Weilburg/Lahn und seine Bedeutung. Neues Jb. Geol. Paläont. 1960: 469–477.

Travassos, L. Sôbre nematódeos cavitários de peixes do Rio Amazonas. Atas Soc. Biol. Rio de J. 4: 15-20 14 figs. Also 13-.

Travassos, L. & Kloss, G. R. Sôbre o gênero Rondonema Artigas, 1926 (Nematoda). in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 511–519 10 figs.

Tribush, T. M. Some observations on the Asplanchnidae (Rotifera) of the Rybinsk Reservoir. Byull. Inst. Biol. Vodochr. No. 6: 18-19. [In Russian].

Trilles, J. P. see Euzet, L.

Tromba, F. G. & Baisden, L. A. Diagnosis of experimental stephanuriasis in swine by a double diffusion agar precipitin technique. J. Parasit. 46 5 Sect. 2: 29. [Abstract].

Trousil-Linhart, W. Ein einfaches Verfahren zur Untersuchung von Rädertieren. Mikrokosmos 46 1957: 233–235 1 fig.

Tsai, C. T. see Hsü, H. F.

Tulkki, P. Studiens on the bottom fauna of the Finnish southwestern archipelago. I. Bottom fauna of the Airisto Sound. Ann. Soc. zool.-bot. fenn. Vanamo 21: 1-26 18 figs.

Tulp, A. S. see Hartog, C. den.

Turco, C. A. see Sweet, W. C.

Turner, J. H., Kates, K. C., Lindahl, I., Whitmore, G. E. & Enzie, F. D. Effectiveness of three management systems on parasitism in lambs. II. Kinds and levels of parasitisms relative to exposure, medication, and weather. J. Parasit. 46 5 Sect. 2: 40– 41. [Abstract].

Turner, J. H. & Wilson, G. I. The effect of three different exposures to parasitism on the serum proteins of Shropshire lambs. J. Parasit. 46 5 Sect. 2: 29. [Abstract].

Turner, J. H. see Kates, K. C.

Uchida, T. Metamorphosis from the viewpoint of animal phylogeny. Bull. mar. biol. Sta. Asamushi 10: 181-188 5 figs.

Ulmer, M. J. (1). Physa sayii, a new intermediate host for the turtle lung fluke, Heronimus chelydrae (Trematoda: Heronimidae). J. Parasit. 46: 813-814 l fig.

Ulmer, M. J. (2). Passeriform birds as experimental hosts for Posthodiplostomum minimum (Trematoda: Diplostomatidae). J. Parasit. 46 5 Sect. 2: 18. [Abstract].

Ulmer, M. J. see Odetoyinbo, J. A.

Ulyanov, S. D. Seasonal and age dynamics of the more important helminthiases in sheep of South Western Kazakhistan. Trud. Inst. Zool. Alma-Ata 12: 12-136 15 figs. [In Russian].

Urich, K. Über den Stoffbestand der Chloragosomen von Lumbricus terrestris L. Zool. Beitr., N.F. 5 281–289. Urquhart, G. M. see Jarrett, W. F. H.

Vaas, K. F. Hydrobiological observations in the Biesbosch. Arch. néerl. Zool. 13: 619-620.

Vacher, C. see Buttner, A.

Vader, W. J. M. Zonatie in het strand. Natura, Amst. 57: 46-54.

Vajrasthira, S. & Harinasuta, C. The incidence of enterobiasis among children at five schools and two hospitals in Bangkok. Ann. trop. Med. Parasit. 54: 129-131.

Vajrasthira, S. see Harinasuta, C.

Vandermeerssche, G. see Semal--Van Gansen, P.

Vangerow, E. F. Mikropaläontologische Untersuchungen in den Kohlscheider Schichten im Wurmrevier bei Aachen. Geol. Jb. 73 1958: 457-506 5 pls.

Vannini, E. & Stagni, A. Sulla localizzazione perivasale di una cospicua riserva di neoblasti in Spirorbis pagenstecheri. Nota. R.C. Accad. Lincei (8) 29: 126–129 3 pls.

Van Peenen. P. F. D. Extraction of immunologically active protein complexes from *Trichinella* spiralis larvae. J. Parasit. 46 5 Sect. 2: 23. [Abstract].

Van Weerdt, L. G. Studies on the biology of Radopholus similis (Cobb, 1893) Thorne, 1949. Part III. Embryology and post-embryonic development. Nematologica 5: 43-52 l pl. 2 figs.

Varga, L. Rotatorien aus dem Garam-Flusse. Opusc. Zool. Budapest 2 1957: 65-69.

Varga, L. see Kol. E.

Vasantharajin, V. N. see Rangaswami, G.

Vasudev, T. see Jaiswal, G. P.

Vegors, H. H. The effect of forage height on the development of cattle nematode larvae. J. Parasit. 46 5 Sect. 2: 39. [Abstract].

Vegors, H. H. see Lucker, J. T.

Velasquez, C. C. Studies on parasite of Philippine edible fishes. I. Family Clinostomidae in *Ophicephalus striatus* Bloch: *Clinostomum philippensis* sp. nov. with notes on the definitive hosts. Philipp. J. Sci. **38**: 263–278 4 pls.

Venkatesan, R. see Rangaswami, G.

Vereshchagin, S. M. & Sytinski, I. A. Effect of gamma-aminobutyric acid and beta-alanine on motor activity and bioelectric activity of annelid ganglia. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 132: 468-469 2 figs. [Dokl. Akad. Nauk S.S.R. 132: 1213-1215]

Vergin, G. I. see Shevchenko, N. N.

Vernberg, W. B. see Hunter, W. S.

Vibe, P. P. The role of farm animals in the life cycle of Echinococcus multilocularis Leuckart, 1863. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 129 1-6 1959: 1050-1951. Dokl. Akad. Nauk S.S.S.R. 129 1959: 471-473.

Viglierchio, D. R. & Lownsbery, B. F. The hatching response of *Meloidogyne* species to the emanations from the roots of germinating tomatoes. Nematologica 5: 153-157 3 figs.

Vigueras, I. P. Notas sobre algunos cestodes encontrados en Cuba. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 377–397 11 pls.

Villella, J. B. Deroceras laeve, a new first intermediate host of Panopistus pricei Sinitsin, 1931 (Trematoda: Brachylaimidae). J. Parasit. 46 5 Sect. 2: 15. [Abstract].

Villella, J. B., Gomberg, H. J. & Gould, S. E. Immunity in white mice produced by feeding irradiated Awaris larvae. J. Parasit. 46 5 Sect. 2: 24. [Abstract].

Villella, J. B., Gould, S. E. & Gomberg, H. J. Effect of cobalt 60 and X-ray on infectivity of cysticercoids of *Hymenolepis diminuta*. J. Parasit. 46: 165–169 l pl.

Vinickas, Z. & Rimkute, M. Some investigations on Heterodera rostochiensis Wollen. and measures of controlling it. Acta parasit. lithuan. 2 1959 [1960]: 107–114.

Visser, P. S. see Pitchford, R. J.

Voge, M. (1). Fat distribution in cysticercoids of the cestode *Hymenolepis diminuta*. Proc. helminth. Soc. Wash. 27: 1-4 4 figs.

Voge, M. (2). Studies in cysticercoid histology. I. Observations on the fully developed cysticercoid of *Hymenolepis diminuta* (Cestoda: Cyclophyllidea). Proc. helminth. Soc. Wash. 27: 32–36 3 figs.

Voge, M. (3). Studies in cysticercoid histology. III. Observations on the fully developed cysticercoid of Raillietina esticillus (Cestoda: Cyclophyllidea). Proc. helminth. Soc. Wash. 27: 271-274 1 fig.

Voge, M. (4). Observations on the structure of cysticercoids. J. Parasit. 46 5 Sect. 2: 10. [Abstract].

Voge, M. (5). Studies in cysticercoid histology. IV. Observations on histogenesis in the cysticercoid of Hymenolepis diminuta (Cestoda: Cyclophyllidea). J. Parasit. 46: 717-725 2 pls.

Voge, M. & Diaz-Ungria, C. Cestodes de Venezuela. VII. Cestodes de roedores venezolanos. Bol. Inst. Inv. Vet. 10-11 1959: 57-68 10 figs.

Voge, M. & Heynemann, D. Studies on cysticercoid histology. II. Observations on the fully developed cysticercoid of *Hymenolepis nana* (Cestoda: Cyclophyllidea). Proc. helminth. Soc. Wash. 27: 185–188 2 figs.

Voge, M. see Taylor, A. E. R.

Voges, A. Conodonten aus dem Untercarbon I und II (Gattendorfia- und Pericyclus-Stufe) des Sauerlandes. Paläont. Z. 33 1959: 266-314 3 pls. figs.

Voigt, E. Ein parasitischer Nematode in fossiler Coleopteren-Muskulatur aus der eozänen Braunkohle des Geiseltales bei Halle (Saale). Paläont. Z. 31 1957: 35-39 l pl.

Vokes, H. E. Miocene fossils of Maryland. Bull. Md. Dep. Geol. 20 1957: VII 1-85 31 pls.

von Mechow Lewis, F. & Mai, W. F. Survival of encysted and free larvae of the golden nematode in relation to temperature and relative humidity. Proc. helminth. Soc. Wash. 27: 80-85.

Wagh, P. V. see Kewalramani, H. G.

Waitz, J. A. Telorchis bonnerensis n. sp. (Trematoda: Digenea) from the intestine of larval Ambystoma macrodactylum Baird, from northern Idaho. J. Parasit. 46: 815-818 l pl.

Waitz, J. A. & Mehra, K. N. A new nematotaeniid from the salamander, *Plethodon vandykei*, from northern Idaho. J. Parasit. 46 5 Sect. 2: 17–18. [Abstract].

tl

b

Waldén, H. W. Eucotyle clangulae n. sp., a new digenetic trematode, from the kidney of Clangula hyemalis (L.). Ark. Zool. Serie 2 12 35: 571-575 2 figs.

Wallace, H. R. (1). Movements of eelworms. VI. The influences of soil type, moisture gradients and host plant roots on the migration of the potato-root eelworm Heterodera rostochiesis Wollenweber. Ann. appl. Biol. 48: 107-120 12 figs.

Wallace, H. R. (2). Observations on the behaviour of Aphelenchoides ritzema-boss in chrysanthemum leaves. Nematologica 5: 315-321 4 figs.

Wallace, H. R. see Hesling, J. J.

Walliser, O. H. Rhombocomiculum comleyense n. gen., n. sp. (Incertae sedis, Unterkambrium, Shropshire). Paläont. Z. 32 1958: 176–180 1 pl.

Wanless, H. R. Pennsylvanian faunas of the Beardstown, Glasford, Havana, and Vermont Quadrangles. Rep. Invest. Ill. geol. Surv. 205 1958: 1-59 figs.

Ward, H. L. Acanthocephala from shore birds of Egypt, with the description of a new species of Medio-thynchus. J. Parasit. 46: 611-613.

Warner, E. see Sweet, W. C.

Warner, L. J. & Hague, N. G. An improved method of making perspex cavity blocks for the processing of nematodes. Nematologica 5: 71-72 2 figs.

Warwick, T. & Mann, K. H. The freshwater leeches of Scotland. Ann. Mag. nat. Hist. (13) 3: 25-34.

Waters, R. A. S. Numbers and weights of earthworms under a highly productive pasture. N.Z. J. Sci. Tech. 36A 1955: 516-525 4 figs.

Watson, D. E. see Chu, G. W. T. C.

Watson, N. H. F. & Price, J. L. Experimental infections of cyclopid copepods with *Triaenophorus crassus* Forel and *T. nodulosus* (Pallas). Canad. J. Zool. 38: 345-356

Waurik, F. Beitrag zur Planktonkunde Ober-Ägyptens. Anz. öst. Akad. Wiss. 96 [1960]: 300-306 3 figs.

Webby, B. D. A lower Mesozoic annelid from Rock Point, South-western Wellington, New Zealand. N.Z. J. geol. geophys. 1 1958: 509-513 figs.

Weber, W. Rädertiergallen an der Schlauchalge Vaucheria. Mikrokosmos 49: 97-102 11 figs.

Wehr, E. E. see Hwang, J. C.

Weinmann, C. J. Studies on schistosomiasis. XV. Resistance to Schistosoma mansoni in mice immunized with Trichinella spiralis. J. Parasit. 46 5 Sect. 2: 37. [Abstract].

Weinmann, C. J. see Hunter, G. W.

Weinstein, P. P. Culture of parasites. [Review of a discussion]. Proc. helminth. Soc. Wash. 27: 233.

Weir, J. S. see Mettrick, D. F.

Weischer, B. (1). Untersuchungen über das Auftreten pflanzenparasitärer Nematoden in Weinbergsboden. Nematologica Suppl. II: 29-39 1 fig.

Weischer, B. (2). Der Einfluss des Bodens auf die Verbreitung pflanzenparasitärer Nematoden in Rebanlagen. Mitt. biol. Bundes-Anst. Berl. No. 99: 51-59 2 figs.

Weischer, B. (3). Aktivitätszustand und Strahlenempfindlichkeit beim Kartoffelnematoden (*Heterodera* rostochiensis Woll.). Mitt. biol. Bundes-Anst. Berl. No. 99: 59-65 3 figs.

Weiser, J. Infections of *Melolontha* larvae in Czechoslovakia. Mém. Soc. zool. tchécosl. 24: 71-74 3 figs. [English summary].

Welch, H. E. (1). Hydromermis churchillensis n. sp. (Nematoda: Mermithidae) a parasite of Aedes communis (DeG.) from Churchill, Manitoba, with observations of its incidence and bionomics. Canad. J. Zool. 38: 465-474 11 figs.

Welch, H. E. (2). Notes on the identities of mermithid parasites of North American mosquitoes, and a redescription of Agamomermis culicis Stiles, 1903. Proc. helminth. Soc. Wash. 27: 203-206 4 figs.

Welch, H. E. (3). The taxonomy of Hydromermis contorta (Linstow, 1889) Hagmeier, 1912, and its synonym Hydromermis rivicola Corti, 1902 (Nematoda: Mermithidae) with notes on some diagnostic characters. Nematologica 5: 92-97 7 figs.

Wells, M. J. & Hunter, W. S. Helminths of the yellowthroat, Geothlypis trichas, during migration. J. Parasit. 46: 623.

Wells, W. H. see Schad, G. A.

Wertheim, G., Zeledon, R. & Read, C. P. Transaminases of tapeworms. J. Parasit. 46: 497-499.

Wessing, A. Untersuchungen zur Frage der plurivalenten Natur der Keimzellenchromosomen von Nematoden. Verh. dtsch. zool. Ges. 1959 [1960]: 73-81 2 figs.

Wetzel, R. & Fortmeyer, H. P. Zur Kenntnis von *Impalaia tuberculata* Mönnig 1924. Z. Parasit. 20: 138-145 4 figs.

Wetzel, W. Nachtrag zum fossilarchiv der Quiriquina-Schichten. Neues Jb. Geol. Paläont. 1960: 439-446 figs.

Wharton, R. H. Studies on filariasis in Malaya: field and laboratory investigations of the vectors of a rural strain of Wuchereria bancrofti. Ann. trop. Med. Parasit. 54: 78-91.

Wharton, R. H. see Laing, A. B. G.

Whitmore, G. see Enzie, F. D.

Whitmore, G. E. see Kates, K. C.

Whitmore, G. E. see Turner, J. H.

Wierzbicki, K. Philometrosis of crucian carp. Acta Parasit. polon. 8: 181-195 1 pl. 2 figs.

Wieser, W. Algenbewohnende Nematoden aus Rovinj (Istrien). Zool. Anz. 164: 82-88 l fig.

Wikgren, B. J. see Pesonen, T.

Wiktor, J. Outline of biological conditions of the Szecezecin Lagoon's waters. Polsk. Arch. Hydrobiol. 7: 7-27 11 figs. [English summary].

Wilkie, L. C. see Sweet, W. C.

Williams, H. H. (1). The intestine in members of the genus Raja and host-specificity in the Tetraphyllidea. Nature 188 4749: 514-516 3 figs.

Williams, H. H. (2). Some observations on Parabothrium gadi-pollachii (Rudolphi, 1810) and Abothrium gadi van Beneden 1870 (Cestoda: Pseudophyllidea) including an account of their mode of attachment and of variation in the two species. Parasitology 50: 303-322 40 förs.

Williams, H. H. (3). Winkenthughesia bramae (Parona & Perugia, 1896) a rare monogenetic trematode and a new record for the British Isles. Ann. Mag. nat. Hist. (13) 2 1959 [1960]: 551-559 13 figs.

Williams, H. H. (4). A list of parasitic worms, including 22 new records, from marine fishes caught off the British Isles. Ann. Mag. nat. Hist. (13) 2 1959 [1960]: 705-715 1 fig.

Williams, H. H. see Euzet, L.

Williams, I. C. The anatomy and some aspects of the biology of *Urotocus rossittensis* (Mühling, 1898) Looss, 1899 (Trematoda: Brachylaemidae) from the bursa fabricii of the rock-pipit, *Anthus spinoletta petrosus* (Montagu). Ann. Mag. nat. Hist. (13) 3: 65–86 7 figs.

Williams, J. B. (1). The dimorphism of Polystoma integerimum (Frolich) Rudolphi and its bearing on relationships within the Polystomatidae: part I. J. Helminth. 34: 151–192 8 figs. 2 pls.

Williams, J. B. (2). The dimorphism of *Polystoma integerrimum* (Frölich) Rudolphi and its bearing on relationships within the Polystomatidae: Part II. J. Helminth. 34: 323–346 4 figs. 1 pl.

Williams, J. R. Studies on the nematode soil fauna of sugarcane fields in Mauritius. 5. Notes upon a parasite of root-knot nematodes. Nematologica 5: 37-42 l pl. 1 text-fig.

Williams, J. S. see Sadun, E. H.

Williams, P. Studies on Ethiopian Chrysops as possible vectors of loiasis. II. Chrysops silacca Austen and human loiasis. Ann. trop. Med. Parasit. 54: 439-459 49 figs.

Williams, R. W. Observations on the life history of Rhabdias sphaerocephala Goodey, 1924 from Bufo marinus L., in the Bermuda Islands. J. Helminth. 34: 93–98 lpl.

Willmott, S. The morphology of Brumptia bicaudata (Poirier, 1908) Odhner, 1926 (Trematoda: Paramphistomoidea). Proc. zool. Soc. Lond. 134: 623-634 9 figs.

Wilson, D. M. Nervous control of movement in annelids. J. exp. Biol. 37: 46-56 3 figs.

Wilson, G. I. see Turner, J. H.

Wilson, J. L. & Majewske, O. P. Conjectured Middle Paleozoic history of Central and West Texas. Publ. Univ. Tex. Bur. econ. Geol. No. 6017: 65-86 2 pls.

Wingard, P. S. see Rhodes, F. H. T.

Winter, H. A. (1). Algunos trematodos digeneos de peces marinos de aguas del Oceano Pacífico del sur de California, U.S.A. y del littoral Mexicano. An. Inst. biol. Mex. 30: 183–208 10 figs. [English summary].

Winter, H. A. (2). La familia Gyliauchenidae Ozaki, 1933 (Trematode: Digenea) y descripción de Ichthyotrema vogelsangi Caballero et Bravo, 1953. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D.F. (Instituto Politecnico Nacional): 337–343 fig.

Wisely, B. Observations on the settling behaviour of larvae of the tubeworm *Spirorbis borealis* Daudin (Polychaeta). Aust. J. mar. freshw. Res. 2: 55-72 1 pl. 8 figs.

Wittekindt, H. see Trautwein, H.

Wood, I. B. & Hansen, M. F. Experimental transmission of ruminant nematodes of the genera Cooperia, Ostertagia and Haemonchus to laboratory rabbits. J. Parasit. 46: 775-776.

Woodwick, K. H. Early larval development of Polydora nuchalis Woodwick, a spionid polychaete. Pacif. Sci. 14: 122-128 3 pls.

Wolff, T. The hadal community, an introduction. Deep-Sea Res. 6: 95-124.

Wolfgang, R. W. see Myers, B. J.

Worley, D. E., Meisenhelder, J. E., Sheffield, H. G. & Thompson, P. E. Laboratory studies on the rodent whipworm, *Trichuris muris* (Schrank, 1788). J. Parasit. 46 5 Sect. 2: 38. [Abstract].

Wright, C. A. Relationships between trematodes and molluses. Ann. trop. Med. Parasit. 54: 1-7.

Wright, J. D. see Stumm, E. C.

Wright, H. G. S. (1). Über den Beutefang bei "Rädertieren" der Gattung Collotheca. Mikrokosmos 49: 228-232 4 figs.

Wright, H. G. S. (2). Rotifera fauna of East Norfolk (Supplementary list). Trans. Norfolk Norf. Nat. Soc. 19: 165-167.

Wright, K. A. see Freeman, R. S.

Wyant, K. D. see Jones, A. W.

Wu, L. Y. (1). Further observations on the morphology of Ditylenchus destructor Thorne, 1945 (Nematoda: Tylenchidae). Canad. J. Zool. 38: 47-49 5 figs.

Wu, L.-Y. (2). Comparative study of Ditylenchus destructor Thorne, 1945 (Nematoda: Tylenchidae), from potato, bulbous iris, and dahlia, with a discussion of de Man's ratios. Canad. J. Zool. 38: 1175-1187 6 figs.

Wu, L.-Y. (3). Criconema celetum, n. sp. (Nematoda: Criconematidae) from African violets in Canada. Canad. J. Zool. 38: 913-916 8 figs.

Wuest, E. C. see Brody, G.

Wulfert, K. (1). Die Rädertiere saurer Gewässer der Dübener Heide. I. Die Rotatorien des Zedlitzmoors und des Wildenhainer Bruchs. Arch. Hydrobiol. 56: 261–298 2 pls. 36 figs.

Wulfert, K. (2). Die Rädertiere saurer Gewässer der Dübener Heide. II. Die Rotatorien des Krebsscherentümpels bei Winkelmühle. Arch. Hydrobiol. 56: 311-333 24 figs.

Yamada, M. see Teshirogi, W.

Yamaguti, S. (1). Studies on the helminth fauna of Japan. Part 55. Four new genera of Acanthocephala from fishes. Publ. Seto mar. biol. Lab. 7 1959: 319-326 1 pl.

Yamaguti, S. (2). Studies on the helminth fauna of Japan. Part 56. Cestodes of fishes, III. Publ. Seto mar. biol. Lab. 8: 41-50 2 pls.

Yamamoto, K. (1). Rotifer fauna of Japanese inland waters. Jap. J. Limnol. 14 1949: 39-46 l pl.

Yamamoto, K (2). Rotifer fauna of Japanese inland waters (2). Jap. J. Limnol. 14 1949; 91–98 l pl. [Japense].

Yamamoto, K. (3). Rotifer fauna of Japanese inland waters (3). Jap. J. Limnol. 14 1949: 141-145 l pl. [Japanese].

Yamamoto, K. (4). Rotifer fauna of Japanese inland waters (4). Jap. J. Limnol. 14 1950: 189-194 l pl. [Japanese].

Yamamoto, K. (5). Rotifer fauna of Japanese inland waters. Jap. J. Limnol. 15 1950: 42-50 1 pl. [Japanese: English summary].

Yamamoto, K. (6). Rotifer fauna of Japanese inland waters (9). Jap. J. Limnol. 16 1952: 81-91 2 pls. [Japanese; English summary].

Yamamoto, K. (7). On the distribution of *Kellicottia longispina* (Kellicott) [Rotatoria] in Japanese lakes. Jap. J. Limnol. 20 1959: 21-26 2 figs. [English summary].

Yamamoto, K. (8). Plankton Rotatoria in Japanese inland waters. Hydrobiologia 16: 364-412 12 figs.

Yanchev, Y. & Dozhkov, D. The biology of the trematode, Proalaria excavata Rud. Dokl. Akad. Nauk S.S.S.R. (Transl.) Biol. Sci. 132: 454-455. (Dokl. Akad. Nauk S.S.S.R. 132: 726-728. [In Russian].)

Yarwood, E. A. see Hansen, G. L.

Yeh, L.-S. (1). On Camallanus johni sp. nov., collected from Xenopus in Tanganyika Territory. J. Helminth. 34: 103-106 7 figs.

Yeh, L.-S. (2). On a collection of camallanid nematodes from freshwater fishes in Ceylon. J. Helminth. 34: 107-116 20 figs.

Yeh, L.-S. (3). On a reconstruction of the genus Camallanus Railliet and Henry, 1915. J. Helminth. 34: 117-124 figs.

Yeh, L.-S. (4). On a new filarioid worm, Edesonfilaria malayensis gen. et sp. nov. from the longtailed Macaque (Macaca irus). J. Helminth. 34: 125-128 5 figs.

Yokogawa, M., Suguro, T., Yoshimura, H. & Tauji, M. Studies on the experimental infection of dogs with three metacercariae of *Paragonimus westermani* (Kerbert. 1878) Braun, 1899. J. Parasit. 46 5 Sect. 2: 35. [Abstract].

Yoshida, Y. see Miyazaki, I.

Yoshimura, H. see Yokogawa, M.

Yuksel, H. S. Observations on the life cycle of Ditylenchus dipsaci on onion seedlings. Nematologica 5: 289-296 3 figs.

Zadura, J. Paramphistomum cervi (Schrank, 1790) as the cause of a serious disease in stags (Cervus elaphus L.). Acta Parasit. polon. 8: 345-350 l pl.

Zajone, I. (1). Beitrag zur Verbreitung und Ökologie des Regenwurms Eophila antipai var. tuberculata Cernosvitov 1935 (Oligochaetae Lumbricidae). Mém. Soc. zool. tchécosl. 24: 280–284 3 figs. [German summary].

Zajone, I. (2). Beitrag zur Kenntnis der Regenwürmer (Oligochaeta, Lumbricidae) der Slowakei. Biológia, Bratislava 15: 331-338 4 figs. [German summary].

Zajone, I. (3). Zur Kenntnis der Regenwürmer-Fauna (Lumbricidae) des Flussgebietes der Ostravica und Dol. Bečva. Přírod. Čas. Slezský 21: 71-78 1 fig. [German summary].

Zakhryalov, Y. N. List of helminths of pig. Trud. Inst. Zool. Alma-Ata 14: 132-147. [In Russian].

Zamith, A. P. L. see Lordello, L. G. E.

Zarnowski, E. Parasitic worms of forest micromammalians (Rodentia and Insectivores) of the environment of Pulawy (district Lublin). II. Trematoda. Acta Parasit. polon. 8: 127-168 5 figs.

Zarnowski, E. & Patyk, W. On the independence of the species *Thominx bohmi* (Supperer, 1953) and its occurrence. Acta Parasit. polon. 8: 205-214 4 pls.

Zdárská, Z. Larvální stadia cizopasných červu z našich suchozemských plzu. Česk. Parasit. 7: 355–379 2 pls. 19 figs. [German summary].

Zeledon, R. see Wertheim, G.

Zelinka, M. The development of biological conditions in a reservoir near Vir during the first years after filling. Sborn. Vys. Skol. Chem.-Tech. Praze 4: 429-476 12 figs. [English summary].

Zercero y D., M. C. Pyragraphorus caballeroi n. sp. (Trematoda de la subclase Monogenea Carus, 1863) en peces marinos del Océano Pacífico del Norte. in Libro homenaje al Dr. Eduardo Caballero y Caballero, Jubileo 1930–1960. Mexico, D F. (Instituto Politecnico Nacional): 345–351 9 figs.

Zhukov, E. V. (1). On the fauna of parasites of fishes of the Chukotsk Peninsula and the adjoining seas. I. Monogenetic trematodes of marine and freshwater fishes. Mag. Parasit., Leningr. 19: 308-332 13 figs.

Zhukov, E. V. (2). Endoparasitic worms of the fishes in the Sea of Japan and South-Kuril shallow-waters. Trav. Inst. zool. Acad. Sci. U.R.S.S. 28: 3-146 68 figs. [English summary].

**Ziesi,** A. (1). Ein Bodenausstecher zum Einsammeln der Lumbriciden aus Ackerböden. Opusc. Zool. Budapest 2 1957: 71–75 1 fig.

Ziesi, A. (2). Beiträge zur Kenntnis der ungarischen Lumbriciden-Fauna. 2. Opusc. Zool. Budapest 3 1959: 95-100 l fig.

Ziegler, W. (1). Conodonten aus Devon und Karbon Südwesteuropas und Bermerkungen zur bretonischen Faltung. Neues Jb. Geol. Paläont. Monatshefte 1959: 289–309 figs.

Ziegler, W. (2). Ancyrolepis n. gen. (Conodonta) aus dem höchsten Teil der Manticoceras-Stufe. Neues Jb. Geol. Paläont. Abh. 108 1959: 75–80 l pl.

Ziegler, W. (3). Conodonten aus dem Rheinischen Unterdevon (Gedinnium) des Remscheider Sattels (Rheinisches Schiefergebirge). Paläont. Z. 34: 169–201 3 pls.

Ziegler, W. see Bischoff, G.

Zimmermann, W. J., Hubbard, E. D. Schwartz, L. H. & Biester, H. E. Epizootiology of trichiniasis in wildlife from a southcentral Iowa area. Proc. Iowa Acad. Sci. 67: 578–590.

Zinn, D. J. Ascarida galli (Schrank, 1788) Freeborn, 1923 inside the egg of the chicken, Proc. helminth. Soc. Wash. 27: 86.

Zivković, H. see Milanovic, D.

Zuckerman, B. M. (1). A method for the concentration of nematodes for mounting from the Baermann apparatus. Proc. helminth. Soc. Wash. 27: 37-39 1 fig.

**Zuckerman**, B. M. (2). Parasitism of cranberry roots by *Tetylenchus joctus* Thorne. Nematologica 5: 253-254 l pl.

Zuferova, L. A. see Butorina, L. G.

Zuili, S. see Jollès, P.

p.

n

o

0,

of

ıg

32

ne

16

ln ol.

en

br

ur

t-

us

va

C.

n-

39

# PLATYHELMINTHES NEMERTINEA MESOZOA

# SUBJECT INDEX

#### GENERAL

Addresses: Reviews.—Helminthology of the Ignalina district of Lithuania, Babenskas, M. Review of bibliography on hydatid infection in Mexico, Biagi F., F. & Mekbel A., S.; Parasitological speculations and patterns, Foster, A. O.; Zoogeography of Monogenea from Amphibia, Koratha, K. J. (1); Parasitological expedition in Albania, Rosický, B.; Zoogeography of digenetic trematodes in shallow-water fishes of Gulf of Mexico, Sparks, A. K.; Goal for parasitologists, Stauber, L. A.; Relation of parasitology to hydrobiological and zoogeographical problems of the S. Atlantic, Szidat, L.

History.—Historical resume of the Helminthological Society of Washington, Gardiner, J. L. et al.

Taxonomy.—Systematic note on the genus Paragonimus, Chen, H. T.; The genus Mesocoelium reviewed, Cheng, T. C. (1); Systematic relationship of the genus Heronimus, Crandall, R. B.; Possible systematic relationship of Digonoporus macroposthia, Dahm, A. G.; Key to Hymenolepis spp. from gulls, Deblock, S. et al.; Systematic note on Helicometrina, Deelman, J. J.; Systematics of the superfamily Podocotyloidea, and a review of cotylocercous cercariae, **Dollfus**, R. P. (3); Systematic note on the genus *Plagiorchis*, **Dollfus**, Systematic note on the genus Plagiorchis, Dollfus, R. P. (4); Systematic position of Stenocollum fragile, Dollfus, R. P. (5); Systematic notes on the family Accacocliidae, Dollfus, R. P. (6); Systematics of the subfamily Opisthioglyphinae, Dollfus, R. Ph. (10); Revision of the genera Lecithodendrium and Pycnoporus, Dubois, G. (1); Constitution of the genus Pseudoneodiplostomum, Dubois, G. (3); Key to Opisthorchioidea cercariae, Dunagan, T. T.; Status of the genera Acanthatrium and Prosthodendrium, Etges, F. J. (2); Form of larval hooks for differentiating Diphyliophthium spp., Fraser, P. G. (2); Classification of the bothrium spp., Fraser, P. G. (2); Classification of the Heteronemertinea, Friedrich, H.; Differential key to virgulate xiphidiocercariae of North America, Hall, Virgulate xipindiocercariae of North America, Plati, J. E. (2); Keys to Strigeoid metacercariae in North American fishes, Hoffman, G. L.; Taxonomic characteristics of eggs and coracidia of Diphyllobothriids, Hilliard, D. K.; Systematic note on the genus Artyfechinostomum, Jain, G. P. (1); Systematic note on the genus Eumegacetes, Jaiswal, G. P. & Vasudev, T.; Systematic position of Proteoephalus sandoni, Khalil, L. F. (1); Systematic relationships of Hymenelskii fucifier, Kornaczewska, W. Taxonomy Hymenolepis furcifera, Korpaczewska, W.; Taxonomy of Amphibdellid monogeneans on electric rays, of Amphibdellid monogeneans on electric rays, Llewellyn, J.; Systematics of the genus Typhlocoelum, Macko, J. K. & Busa, V.'; Systematic notes on the superfamily Hemuiroidea, Manter, H. W. & Pritchard, M. H. (2); Systematics of the European Temnocephalida, Matjašić, J.; Speciation in Inermicapsifer, Mettrick, D. F. & Weir, J. S.; Systematic position of the genus Leptophallus, Odening, K. (2); A broad classification of the Digenea, Odening, K. (3); Systematic position of the genus Encyclometra, Odening, K. (8): Review of the subfamily Haematolocobinas. (8); Review of the subfamily Haematoloechinae, Odening, K. (9); Systematic position of the genus Dihemistephanus, Peters, L. E.; Review of the subfamily Capsalinae, Price, E. W. (1); Specific identification of cestode eggs in poultry, Reid, W. M. (2);

Systematic position of the genus Xenoturbella, Reisinger, E. (1); Grassitrema v. Tricolyledonia, Skrjabin, K. I. & Guschanskaja, L. H.; Status of some Lepocreadium spp., Sogandares-Bernal, F. & Hutton, R. F. (2); Classification of the cyclophyllidean cestodes, Spassky, A. A.; Intraspecific variation in the genus Microphallus, Stunkard, H. W. (1); Systematic note on the genus Notocolylus, Stunkard, H. W. (2); Classification of the family Catenotaenidae, Tenora, F. (1); Systematic note on the genus Urolocus, Williams, I. C.; Systematic note on the family Gyliauchenidae, Winter, H. A. (2).

Technique: Methods.—Method for in vitro culture of Hymenolepis diminuta, Berntzen, A. K.; Staining method for nerve-fibres of planarians, Betchaku, T.; Selective staining of egg-shell of human helminths, Brygoo, E. R. et al.; Method for stimulating cysticercus evagination, Campbell, W. C. & Richardson, T.; Laboratory culture of Austrobilharcia variglandis, Chu, G. W. T. C., et al.; Helminths of medical and veterinary importance, Eichler, W.; Induced hatching of operculate eggs, Friedl, F. E.; Method for recovery of adult schistosomes from mice, Hunter, G. W. (1); Method for estimating number of gyrodactylids on skin of goldfish, Parker, J. C. & Haley, A. J.; Vital staining of nerves in platyhelminths, Reisinger, E. (2); Method for handling small trematodes during staining procedure, Russell, H. T. (2); In vitro culture of regeneration blastemata of planarians, Sengel, C.; Axenic culture of Hymenolepis spp., Taylor, A. E. R. et al.; Culture of parasites, Weinstein, P. P.

Obituary.- † José Manoel Ruiz, Anon. (1).

### STRUCTURE

General.—Morphology of the European Temnocephalida, Matjašič, J.

Organs of attachment.—Attachment of Discocotyle sagittata to gills of trout, Llewellyn, J. & Owen, I. L.; Origin of asymmetry in haptor of Monogenea, Ramalingam, K. (2); Attachment of Parabothrium and Abothrium to intestine of host, Williams, H. H. (2).

Reproductive system.—Hermaphroditic female of Schistosoma japonicum, Chien, K'o. & Liu, S.-T.; Genitalia of Amphibdellid monogeneans, Llewellyn, J.; Periprostate in Noodiplostomum buteonis, Pearson, J. C.

Nervous system.—Of Avitellina centripunctata, Nada-kal, A. M. (5).

Lymphatic system.—Of ruminant-amphistomes, Tandon, R. S. (2).

Excretory system.—Of Avitellina centripunctata, Nadakal, A. M. (5); Of Leptophallus nigrovenosus, Odening, K. (2); Of Telorchis assula, Odening, K. (4); Of Haematoloochus spp., Odening, K. (5).

Larva.—Miracidium of Fasciola hepatica, Dawes, B.; Miracidium of Schistosoma spindalis, Singh, R. N. (3); Morphology of Paramphistomum gotoi miracidium, Tanddon, R. S.; Larval types in Nemertinea, Uchida, T.; Anatomy of Polystoma integerrimum larva, Williams, J. B. (2).

Histology: Cytology.—Electron microscopy of the tail of Himashla cercaria. Cardell, R. R. & Philpott, D. E.; Histology of Haematoloechus confusus, Cheng, T. C. & Provenza, D. V. (2); Subcuticular glands in cercariae, Kruidenier, F. J. (1); Electron microscopy of tails of furcocercariae, Kruidenier, F. J. (3); Histology of eye-spots in Fasciola hepatica

miracidium, Kümmel, G.; Histochemistry of Fasciola indica cuticle, Lal, M. B. & Shrivastava, S. C.; Histochemistry of Dugesia lugubris neoblasts, Lender, T. & Gabriel, A.; Glandular organs in copulatory complex of Polycelis tenuis, Lender, T. & Le Moigne, A.; Trophic function of intestinal epithelium of trematodes, Logachev, E. D. (1); Nature of subcuticular layer in cestodes, Logachev, E. D. (2); Pachytene chromosomes in schistosomes, Menzel, M. Y. & Short, R. B.; Histochemistry of Mehlis' gland in helminths, Rao, K. H.; Electron microscopy of cestode-cuticle, Rothman, A. H.; Penetration glands in Raillietina onchospheres, Sawada, I. (2); Histogenesis of cestode-cuticle, Schiller, E. L.; Chromosomes in nine schistosomes, Short, R. B. & Menzel, M. Y.; Cuticula and subcuticula of Cotugnia digonopora, Siddiqi, A. H. (1); Histology of Hymenolepis diminuta cysticercoid, Voge, M. (2); Voge, M. & Heynemann, D.; Histology of cysticercoids, Coge, M. (3); Histology of cysticercoids, Voge, M. (4); Histogenesis in Hymenolepis diminuta cysticercoid, Voge, M. (5).

Variation: Anomaly.—Genital anomaly in Taenia pisiformis, Anderson, M. G.; Morphological variation in new Hymenolepis sp., Freeman, R. S.; Variation in rostellar hook number of Echinococcus spp. in N. America, Lubinsky, G. (2); Conjoined twin rediae, Schell, S. C.; Dimorphism of Polystoma integerrimum, Williams, J. B. (1), (2).

## **PHYSIOLOGY**

Constitution: Metabolism.—Biochemistry of Echinococcus granulosus, Agosin, M.; Uptake of radio-active sulphates by trematodes, Bélanger, L. F.; Parasitic physiology, Bueding, E.; Glycogen in Opisthorchis Jelineus, Bruskin, B. R.; Phenolase in metacercaria-cyst, Campbell, W. C. (2); Enzymes in Schistosoma mansoni, Dodin, A. et al.; De-pigmentation of planarian eye, Kishida, Y. (1), (2); Kido, T. & Kishida, Y.; Properties of metacercarial cyst, Lenhoff, H. M. et al.; Alkaline phosphatase activity in Schistosoma mansoni, Lewert, R. M. & Dusanic, D. G.; Peptidase and lipase activity of extracts of Schistosoma cercariae, Mandlowitz, S. et al.; Chemistry of cercarial eye-spots, Nadakal, A. M. (1); Pigments in larval trematodes, Nadakal, A. M. (2); Biochromes in larval trematodes, Nadakal, A. M. (6); Absorption of Iron-59 by Fasciola hepatica, Pantelouris, E. M. & Gresson, R. A. R.; Glucose absorption by Hymenolepis diminuta, Phifer, K. (2); Amino acid permeation into tapeworms, Read, C. P. et al.; Permeation of urea into testodes, Simmons, J. E. et al.; Fat-distribution in Hymenolepis diminuta cysticercoids, Voge, M. (1); Polysaccharides in Raillietina cysticercoid, Voge, M. (3); Transaminase activity of Hymenolepis diminuta, Wertheim, G. et al.

Movement.—Locomotion of Geoplana, Hauser, J. & Maurmann, E.

**Growth.**—Growth-rate of strains of *Echinococcus* multilocularis, **Lubinsky**, G. (3).

Environmental effects.—Oxygen and temperature tolerances of triclads, Abbott, B. J.; Host-influence on development of Diplostonum phaxini, Berrie, A. D. (1); Effect of a microsporidian on trematodes, Cort, W. W. et al. (1); Effect of temperature variation on development of Fasciola gigantica eggs, Dinnik, J. A. & Dinnik, N. N. (1); Effects of starvation on Hymenolepis diminuta, Goodchild, C. G.; Effects of temperature on plerocercoid of Diphyllobothrium latum, Pesonen, T. &

Wikgren, B. J.; Effects of stilbestrol on Schistosoma mansoni in mice, Robinson, E. J.; Effect of environmental conditions on bionomics of Fasciola hepatica eggs, Rowcliffe, S. A. & Ollerenshaw, C. B.; Effect of age and season on helminths in sheep, Ulyanov, S. D.; Effect of cobalt 60 and X-ray on Hymenolepis diminuta cysticercoids, Villella, J. B. et al.

## REPRODUCTION AND DEVELOPMENT

Reproduction.—Fission in Dugesia genocephala, Kanatani, H. (2); Asexual reproduction in sporocyst of Opisthorchis felineus, Logachev, E. D. & Bruskin, B. R. (1).

Gametogenesis.-In planarians, Lentati, G. B.

Maturation.—Cross-fertilization necessary in maturation of Paragonimus westermani, Yokogawa, M. et al.

Development.—Of Carmyerius exoporus in snail-host, Dinnik, J. A. & Dinnik, N. N.; Post-larval development of Squaloncheosyle torpedinis, Euzet, L. & Raibaut, A.; Of Bathybothrium rectangulum in barbel, Kulakovakaya, O. P.; Of Taenia taeniaeformis larva in rat. Rohde, K.; Of Paramphistomum gotoi miracidium, Tandon, R. S. (1); Germ-cell cycle in Crepidostomum cornutum, Cheng, T. C. & James, H. A. (2); Post-embryonic development of Lineus spp., Gontcharoff, M.; Prepatent periods of geographic strains of Schistosoma japonicum, Hsü, H. F. et al.; Rhombogen phase of Dicyema sullivani, McConnaughey, B. H.; Germ-cell formation in trematode larva, Schüller, G.

Life-history.—Of Philophthalmus sp., Alicata, J. E. & Noda, K.; Of Nanophystus salmincola, Bennington, E. & Pratt, I.; Of Plagiorchis cirratus, Buttner, A. & Vacher, C. (1), (2); Of Brachycocium obesum, Cheng, T. C. (2); Of Heronimus chelydrae, Crandall, R. B.; Of Hymenolepis visulae, Czapliński, B.; Of Nicolla gallica, Dollifus, R. P. (3); Of pophyllobothrium medium, Fraser, P. G. (3); Of Spirorchis elegans, Goodchild, C. G. & Kirk, D. E.; Of Camyerius dollyus; Gretillat, S. (1); Of Haematoloechus similis, Grabda, B.; Of Mesostephanus appendiculatoides, Hutton, R. F. & Sogandares-Bernal, F. (3); Of Pseudodiorchis prolifer, Kisielewska, K. (1); Of Soricinia diaphana, Kisielewska, K. K. (2); Of new Tylodelphys sp., Kozicka, J. & Niewiadomska, K. (1); Of Tylodelphys clavala, Kozicka, J. & Niewiadomska, K. (2); Of heterobilharzia americana, Lee, H. F. (2); Of new subspecies of Plagiorchis vespetilionis, Macy, R. W. (1); Of Marsipometra hastata, Meyer, F. P.; Of Mesostephanus kentuckiensis, Myer, D. G.; Of Avitellina centripunctala, knatakal, A. M. (4); Of Echinostoma nudicaudatum, Nasir, P. (3); Of Neodiplostomum buteonis, Pearson, J. C.; Of Astiotrema monticellii, Shevchenko, N. N. & Vergin, G. I.; Of Schistosoma indicum, Singh, R. N. (7); Of Schistosoma incognitum, Sinha, P. K. & Srivastava, H. D.; Of new Notocotylus sp., Stunkard, H. W. (2); Of Dicrocolioides petiolatum, Timon-David, J. (2); Life-history note on Liga soricis, Canarls, A. G.; Life-history note on Lehimostephilla haematopi, Ching, H. L. (3); Life-histories of cestodes fishes, Hoffman, G. L.; Life-history note on for Cardiocephalus brandesi, Hunter, W. S. & Vernberg, W. B.; Life-histories of the Nemertinea, Iwata, F.; Life-history notes on two spp. of Diploposthe, Jareeka, L. (2); Life-history notes on two spp. of Diploposthe, Jareeka, L. (2); Life-history notes on two spp. of Diploposthe, Jareeka, L. (2); Life-history notes on two spp. of Diploposthe, Jareeka, L. (2); Life-history notes on two spp. of Diploposthe, Jareeka, L. (2); Life-history no

Life-history note on Megalodiscus microphagus, Macy, R. W. (2); Life-history note on Acanthoparyphium spinulosum, Martin, W. E. & Adams, J. E.; Life-history note on Echinochasmus milvi, McCauley, J. E. & Pratt, I. (2); Experimental life-history of Cotylurus brevis, Nasir, P. (1); Experimental life-history of Clinostomum piscidium, Singh, R. N. (8); Partial life-history of Galactosomum spinetum, Sogandares-Bernal, F. & Hutton, R. F. (1); Notes on life-histories of Moniezia, Thysaniezia and Avitellina, Sokolova, I. B. & Panin, V. Y.; Experimental life-history of Echinococcus multilocularis, Vibe, P. P.; Life-history note on Prolaria excavata, Yanchev, Y. & Bozhkov, D.

Bionomics of ova and larvae.—Egg-shell constitution in helminths, Capron, A. & Brygoo, E. R. (2); Penetration of Fasciola hepatica sporocyst into snail-host, Dawes, B.; Degeneration in Hymenolepis nana eggs, Gherman, I.; Growth and hatching of Taenia taeniae-formis ova, Jones, A. W. et al.; Maintenance of Echinococcus larvae, Lubinsky, G. (1); Resistance of Taenia saginata eggs to freezing, Lucker, J. T.; Survival of Taenia eggs in hay, Lucker, J. T. & Douvres, F. W.; Effects of light on emergence of Plagiorchis cercaria, Macy, R. W. (1); Penetration of schistosome cercariae, Millemann, R. E. & Mergenhagen, S. E.; Egglaying by Schistosoma mansoni in vitro, Robinson, D. L. H.; Hatching of Raillistina onchospheres, Sawada, I. (3); Bionomic note on Schistosoma spindalis miracidium, Singh, R. N. (3); Morphological adaptation of tapeworm eggs, Spasskaya, L. P. & Kopaev, Y. N.; Bionomics of Diplostomum spathaceum cercariae in littoral zone of a Polish lake, Styczyńska-Jurewicz, E.

Regeneration: Reconstitution.—Regeneration of head and eyes of Dugssia lugubris, Bondi, C.; Reconstitution of pharynx in planarians, Chandebois, R.; Suppression of bipolar heads in Dugssia gonocephala, Kanatani, H. (1); Cephalic regeneration in Dendrocelum, Kolmayer, S. & Stephan-Dubois, F.; Inhibition in regenerating planarian, Lender, T.; Regeneration in Planaria toroa, Pasquini et al.; Cell-migration in Turbellaria, Seilern-Aspang, F. (1); Tumorformation in regeneration of planarians, Seilern-Aspang, F. (2); Tumors in triclads, Seilern-Aspang, F. (3); Migration of neoblasts in Dendrocelum lactum, Stephan-Dubois, F. & Kolmayer, S.; Formation of copulatory complex in regenerating planarian, Teshigori, W. & Yamada, M.

# **EVOLUTION AND GENETICS**

Evolution: Phylogeny.—Evolution from Turbellaria, George, C. J.; Origin of complex life-histories in Digenea, Heyneman, D.; Phylogeny of Amphibdellid monogeneans, Llewellyn, J.; Phylogenetic importance of body-differentiation in trematodes, Oshmarin, P. G.

Host-parasite relations.—Host-specificity of Moniezia alba, Bondareva, V. I. (1); Specificity of the genus Schistocephalus, Dubinina, M. N.; Host-specificity in Monogenea of Amphibia, Koratha, K. J. (1); Ecology of host-parasite relationship, Noble, E. R.; Host-parasite relationship between Schistosoma mansoni and Australorbis glabratus, Simões Barbosa, F. A.; Host-specificity in the Tetraphyllidea, Williams, H. H. (1); Relationships between trematodes and molluscs, Wright, C. A.

#### ETHOLOGY

Bionomics.—Ecology of helminths of freshwater fishes, Bauer, O. N.; Ecology of triclads in Wurttem-Vol. 97

berg, Becker, E.; Bionomics of Fasciola hépatica in the basin of the R. Barycz, Poland, Bednarz, S. (2); Hyperinfestation of field-mice with cysticerci, Bernard, J.; Cannibalism in planarians, Best, J. B.; Vertical distribution of Turbellaria in Lake Harsz, Chodorowski, A. (2); Population-growth of Dugesia, Cole, L. C.; Root, R. B.; Transmission of microsporidian to trematodes, Cort, W. W. et al. (2); Ecological notes on Convoluta roscoffensis, Guérin, R.; Ecological note on nemertines at Banyuls, Kerneis, A.; Relationship between Myxidium and Phyllodistonum in pike, Krotas, R. (1); Unisexual infections of Schistosoma mansoni in mice, Lagrange, E.; Biology of the European Temnocephalida, Matjašič, J.; Gregarine parasites of planarians, Puytorac, P. de & Grain, J.; Population biology of Polycelis tenuis, Reynoldson, T. B.; Biological notes on planarians, Schwegler, H. W.; Ecology of estuarine platyhelminth parasites, Shuster, C. N.

Immunobiology: Serology.—Complement-fixation and intradermal tests for Fasciola hepatica and Schistosoma bovis, Azevedo, J. F. de & Gomes, F. C.; Reduction-rate of infection of sheep with cestodes in Kazakhstan, Bondareva, V. I. (2); Susceptibility of wild mammals to Schistosoma mansoni, Bruce, J. I. et al.; Ante-mortem diagnosis of bovine cysticercosis, Dewhirst, L. W. et al.; Immunization of chickens, pigs and sheep against helminths, Ershov, V. S.; Non-reciprocal acquired resistance between Schistosoma mansoni and Schistosomatium douthitti, Hunter, G. W. & Weinmann, C. J.; Infectivity of strains of Schistosoma japonicum in rhesus monkey, Hsü, H. F. & Li Hsü, S. Y.; Standardization of intradermal test for schistosomiasis, Kagan, I. G.; In vitro action of vertebrate sera on cercaria, LeFlore, W. B.; Immunology of schistosoma mansoni, Levert, R. M. & Mandlowitz, S.; Immunization of monkeys against Schistosoma japonicum, Li Hsü, S. Y. & Hsü, H. F. (1); Infectivity of Philippine strain of Schistosoma japonicum in snails, LI Hsü, S. Y. & Hsü, H. F. (2); Immune blood for schistosome, Melseenhelder, J. E. et al.; Immunologic basis of host-specificity in Spirometra larva, Mueller, J. F.; Immunity to parasites, Oliver-Gonzalez, J. & Anderson, R. I.; Effect of filtration on schistosome antigen, Pellegrino, J. & Rodrigues, B. A.; Serodiagnosis of schistosomiasis, Sadun, E. H. et al.; Age of mice and resistance to strobilocercosis, Shultz, Age of mice and resistance to strobilocercosis, Shultz, R. S. & Andreeva, N. K.; Resistance to Schistosoma in mice immunized with Trichinella, Weinamann, C. J.

Pathology: Effect on Host.—Nature of pigments in fascioloidiases, Campbell, W. C. (1); Histopathology of Crepidostomum in Sphaerium striatinum, Cheng, T. C. K. & James, H. A. (1); Isopamochis associated with "ink-spot" disease in Viet-Nam fishes, Dollfus, R. P. (9); Effect of Schistosoma on egg-production in Bulinus truncatus, Najarian, H. H.; Pathogenicity of Ogmocotyle indica in sheep and goats, Pande, B. P. & Bhatia, B. B.; Distribution of Comunus in pigs, Shol, V. A. (2); Changes in skin of mouse during migration of schistosome larvae, Stirewalt, M. A.; Effect of acute schistosomiasis on activity in mice, Stretch, R. G. A. et al.; Swimmers' itch in New York State, Swanson, G. A. et al.; Dermatitis-producing cercaria in Argentina, Szidat, L. & Czibulinski de Szidat, U.; Pathology of Paramphistomum cervi in stags, Zadura, J.

Epidemiology.—Epidemiology of Schistosomiasis mansoni in Salvador, Barretto, A. C.; Epidemiology of urinary schistosomiasis in Somalia, Baruffa, G.;

Incidence of Fasciola hepatica in basin of R. Barycz, Bednarz, S. (1); Autoctonous human hydatid infection in Mexico, Biagi F., F. & Mekbel A., S.; Schistosoma mansoni in Madagascar, Capron, A. & Brygoo, E. R. (1); Vesical schistosomiasis in Angola, Carvalho, R. G. de; Seasonal fluctuations in larval trematode infections, Cort, W. W. et al. (3); Schistosomiasis in southern Tunisia, Coumbaras, A.; Incidence of Hymenolepis nana in Albanian children, Erhardova, B. et al.; Human fascioliasis in Hampshire, Facey, R. V. & Marsden, P. H.; Schistosomiasis in Angola, Ferreira, E. G. & Gomes, J. A.; Incidence of Diphyllobothrium larvae in trout in Britain, Fraser, P. G. (1); Cysticercus and hydatid infection of Kenyan cattle, Froyd, G. (1); Incidence of Fasciola gigantica and Echinococcus in Kenya cattle, Froyd, G. (2); Incidence of anoplocephalid cestodes in sheep in Kirgizia, Gagarin, V. G. et al.; Human sparganosis in the U.S.A., Gleason, N. N.; Opisthorchiasis in Thailand, Harinasuta, C. & Vajrasthira, S.; Epidemiology of Fasciolopsis buski in South Taiwan, Hslen-chen, H. (2); Schistosome dermatitis in Colorado, Hunter, G. W. (2); Prevalence of fascioliasis in Japan, Itagalki, H.; Seasonal distribution of fish parasites of Rybinsk Reservoir, Izyumova, N. A. (2); Schistosomiasis in Khartoum Prov., Sudan, Malek, E. A. (1); Schistosomiasis among southern islands of Lake Kivu, Meyus, H. et al.; Pulmonary paragonimiasis in the Philippines, Monserrat, C. & Buenaventura, A.; Schistosomiasis in Mozambique, Morais, T. de (2); Human helminthiasis in Near and Middle East, Mumford, E. P.; Incidence of helminths among out-patients at Ezbet-El-Burg, Egypt, Nagaty, H. F. & Khalil, H. M. (2); Fasciolosis in Lithuania, Paulyukonis, F. V.; Quantitative indices of helminths in fishes, Petrushevskaya, M. G.; Hydatid disease in Alaska, Rausch, R. L. (1); Paragonimiasis in South Korea, Sadun, E. H. & Buck, A. A.; Ecology of opisthorchiasis, Shol, V. A. (1); Seasonal incidence of furcocercariae in Indoplanorbis exustus, Singh, R. N. (9); I

Control.—Efficacy of piperazine adipate against Heterophyes, Nagaty, H. F. & Khalil, H. M. (1); Past and present treatment of schistosomiasis, Nagaty, H. F. & Rifaat, M. A.; Antibilharzial effect of new thioxanthane compound, Nagaty, H. F. et al.; Efficacy of dithiazine against Hymenolopis nana in children, Ricci, M. & Gagliano, E.

# HOST-DISTRIBUTION

Coelenterata.—Accacoeliid metacercariae in coelenterates, Dollfus, R. P. (6).

Chaetognatha.—Trematodes from chaetognaths, Dollfus, R. P. (2); Accacoeliid metacercariae in chaetognaths, Dollfus, R. P. (6).

Annelida.—Furcocercariae encysting in leeches, Wales, Iles, C.; Cysticercoids of Aploparaksis furcigera in Limnodrilus sp., Poland, Jarecka, L. (1).

Echinodermata.—Rhabdocoeles from echinoderms, Hyman, L. H. (2).

Mollusca.—Cerithidea californica as interhost of Himasthla sp., California, Adams, J. E. & Martin, W. E.; Philophthalmus cercaria in Tarebia granifera mauiensis, Alicata, J. E. & Ching, H. L.; Philophthalmus cercaria in Tarebia granifera mauiensis and Melanoides newcombi, Hawaii, Alicata, J. E. & Noda,

K.; Original material of Cercaria haswelli redescribed from Mytilus canaliculatus, New Zealand, Angel, L. M.; Nanophyetus salmincola cercariae in Oxytrema silicula, Oregon, Bennington, E. & Pratt, I.; Limnaea peregra as interhost of Diplostomum phoxini, Scotland, Berrie, A. D. (1); Limnaea stagnalis and L. limosa as interhosts of A. D. (1); Limaea stagnais and L. imassa as internosis of Plagiorchis cirratus, Buttner, A. & Vacher, C. (2); Liga soricis cysticercoids in land-snails, N. America, Canaris, A. G.; Zonitoides ligerus and Agriolimax agrestis as interhosts of Brachycoelium obesum, Virginia, Cheng, T. C. (2); Sphaerium striatinum as interhost of Crepido-stomum cornutum, Cheng, T. C. & James, H. A. (1), (2); Hemiuroid cercariae in molluscs of Friday Har-bour, Washington State, Ching, H. L. (2); New Gorgoderid cercaria in Pisidium compressum, Oklahoma, Coil, W. H.; Physa integra as experimental interhost of Heronimus chelydrae, Crandall, R. B.; New furcocercaria in Planorbis carinatus, Wales, Erasmus, D. A.; Anaplocamus dilatatus as interhost of new Prosthodendrium sp., Virginia, Etges, F. J. (1); Haematoloechus similis cercaria in Planorbis planorbis, Poland, Grabda, B.; Helisoma and Menetus spp. as interhosts of Spirorchis elegans, Goodchild, C. G. & Kirk, D. E.; Bulinus spp. as interhosts of Caymerius dolfius in Madagascar, Grétillat, S. (1); Schistosome cercariae from Gyraulus sp., California, Grodhaus, G.; New virgulate xiphidiocercariae in Goniobasis and Pleuvocerca spp., Indiana, Hall, J. E. (2); Larval trematodes from snails, Colorado, Hunter, G. W. & Birkenholz, D. E.; Tricho-bilharzia physellae in Physa propinqua, Colorado, Hunter, G. W. (2); Furcocercariae in freshwater molluses, Wales, Iles, C.; Echinostome cercariae in Limnaea and Planorbis spp. from the London area, Khan, D. (1); Gymnocephalous cercariae in Bithynia tentaculata, London area, **Khan**, D. (2); Lymnaea and Pseudo-succinea as interhosts of Heterobilharzia americana, Lee, H. F. (2); Lymnasa stagnalis as interhost of new subsp. of Plagiorchis vespertilionis, Washington State, Macy, R. W. (1); Megalodiscus microphagus cercaria in Menetus cooperi and Graulus sp., Oregon, Macy, R. W. (2); Bulimus forskalii as interhost of Gastrodiscus aegyptiacus, Sudan, Malek, E. A. (2); Cerithidea californica as interhost of Acanthoparyphium spinulosum, Martin, W. E. & Adams, J. E.; Oxytrema silicula as interhost of Echinochasmus milvi, N. America, McCauley, J. E. & Pratt, I. (2); Interhosts of Schistosoma in Mozambique, Morais, T. de (1); Assiminea spp. and Paludinella japonica as interhosts of Paragonimus, Miyazaki, I. & Yoshida, Y.; Mesostephanus kentuckiensis cercaria in Goniobasis X.; Mesostepianus keinukatensis cercaria in Connecessos liuescens, Ohio, Myer, D. G.; Cercaria and meta-cercaria of Cotylurus brevis in Lymnaea stagnalis, England, Nasir, P. (1); New Xiphidiocercaria in Lymnaea stagnalis, England, Nasir, P. (2); Cercaria of new Echinostoma sp. in Lymnaea stagnalis, England, Nasir, P. (2). Cercaria of new Echinostoma sp. in Lymnaea stagnalis, England, Nasir, P. (2). (3) ; Cysticercoid of Choanotaenia crassiscolex in Oxychilus cellarius, Britain, Rawson, D. & Rigby, J. E.; Cercaria of Astiotrema monticellii in Bithynia leachi, Russia, Shev-chenko, N. N. & Vergin, G. I.; Two new Strigcid cercariae from Limnaea, Allahabad, Singh, R. N. (1); New schistosome cercaria in Limnaea, Allahabad, Singh, R. N. (2); Two new strigeid cercariae from snails, Allahabad, Singh, R. N. (4); New Strigeid cercaria from Limnaea, Allahabad, Singh, R. N. (5); Furcocercariae in Indoplanobis exustus in Allahabad, Singh, R. N. (9); Lymnaea luteola var. australis as interhost of Schistosoma incognitum, India, Sinha, P. K. & Srivastava, H. D.; Polyclad commensal of proso-branchs, Smith, E. H.; Galactosomum cercaria in Cerithium muscarum, Florida, Sogandares-Bernal, F. & Hutton, R. F. (1); Cercaria of new Notocotylus sp. in Hydrobia minuta, Maine, Stunkard, H. W. (2); New la, ra ie,

); a,

g, 10-

IT-

a, of

lo-

lis

his

ur,

us oa,

T-

r, s, ea D.

p.

ıs,

r-& o-I.

is

ad, ea w

P.

us

d

n

d

2

schistosome cercaria in Tropicorbis peregrinus, Argentina, Sxidat, L. & Cxibulinski, de Szidat, U.; Helicopsis arenosa as interhost of Dicrocoelioides petiolatum, Timon-David, J. (2); Physa sayii an interhost for Heronimus chelydrae, Iowa, Ulmer, M. J. (1); Deroceras laeve as first interhost of Panopistus pricei, Villella, J. B.; Terrestrial molluses as interhosts of helminths, Zdárská, Z.

Crustacea.—Plagiorchis cirratus metacercaria in Gammarus pulex, Buttner, A. & Vacher, C. (1); Gammarus pulex and Asellus aquaticus as interhosts of Plagiorchis cirratus, Buttner, A. & Vacher, C. (2); Crepidostomum cornutum metacercariae in Cambarus bartoni sciotensis, Virginia, Cheng, T. C. & James, H. A. (2); Cyclops s. strenuus as experimental interhost of Hymenolepis vistulae, Carapliński, B.; Microphallid metacercariae from Crustacea in English Channel, Deblock, S.; Microphallid metacercariae from Crustacea in the Pas de Calais, Deblock, S. et al.; Parathelphusa ceylonensis as second interhost of Pleurogenoides sitapurii, Dissanailke, A. S. & Fernando, C. H.; Diaptomus and Cyclops spp. as experimental interhosts of Diphyllobothrium medium, Fraser, P. G. (3); Copepoda and Cladocera as interhosts of cestodes in Lake Goldapiwo, Poland, Jarecka, L. (1); Copepods as interhosts of Diphylobothe spp., Poland, Jarecka, L. (2); Crustaceans as interhosts of new Fimbriaria sp., Far East, Korel Hilkov, G. A.; Cyclops bicuspidatus as interhost of Marsipometra hastata, Meyer, F. P.; Helminths in benthic crustaceans of Barents Sea, Ouspenskaia, A. V.; Copepods as interhosts of Drepaniolamia przewalskii, Petrochenko, V. I.; Metacercariae in Gammarus pulex, France, Timon-David, J. (1); Armadillidium vulgare and Armadillo officinalis as interhosts of Dicrocoelioides petiolatum, Timon-David, J. (2); Copepods as experimental interhosts of Triaenophorus spp., Watson, N. H. F. & Price, J. L.

Insecta.—Hymenolepis prolifer larva in Glomeris hexasticha, Reer, J. & Santa, E. della; Possible antivectors of Dicrocoelium dendriticum, Brangham, A. N. (1), (2); Metacercaria of new Prosthodendrium sp. in Hexagenia bilineata, Virginia, Etges, F. J. (1); Metacercaria of Haematoloechus similis in Coenagrion sp., Poland, Grabda, B.; Insect larvae as interhosts of Hymenolepis multistriata and Tatria decacantha, Golikova, M. N.; Lecithodendriid metacercariae in naiads, Indiana and Michigan, Hall, J. E. (1); Glomeris connexa as interhost of Pseudodiorchis prolifer, Poland, Kisielewska, K. (1); Geotrupes stercorosus as interhost of Soricinia diaphana and Staphylocystis furcata, Poland, Kisielewska, K. K. (2); Insect larvae as experimental interhosts of new subsp. of Plagiorchis vespertilionis, N. America, Macy, R. W. (1).

Acari.—Protoschelobates as potential vector of Moniezia spp. of sheep in India, Nadakal, A. M. (3); Interhosts of Moniezia, Thysaniezia and Avitellina in Kazakhstan, Sokolova, I. B. & Panin, V. Y.

Fishes.—Helminths of fish in Kustanaísk Province, Agapova, A. I.; Helminths of fish in Kazakhstan, Agapova, A. I. & Maksimova, A. P.; Diplostomum phoxini metacercaria in Phoxinus phoxinus, Scotland, Berrie, A. D. (1); Two types of Diplostomum larvae in eyes of Gasterostus aculeatus, Scotland, Berrie, A. D. (2); New Microcotyle sp. from Trachurops, Mexico, Bravo-Hollis, M.; Two new Monogenean genera on Pacific fishes, Caballero y C., E. & Bravo-Hollis, M.; Digenea in fishes of Friday Harbour, Washington, Ching, H. L. (1); New Creptotrema sp. in trout, Turkey, Coil, W. H. & Kuntz, R. E. (1); Trematodes from fishes in E. Pakistan, Coil, W. H. & Kuntz, R. E. (3);

Transversotrema patialense metacercaria in Macropodus cupanus, Ceylon, Crusz, H. & Sathananthan, A. H.; cupanus, Ceyson, Crusz, H. & Sathananthan, A. H.; Digenea in gobiids from Naples and Bahamas, De Giusti, D. L. & Nasir, P.; Hemiurus communis redescribed from Salmo trutta, Raniceps raninus and other fishes, Sweden, Dollfus, R. P. (7); New Lomasoma sp. in Solea solea, Banyuls, Dollfus, R. P. (8); Isoparorchis trisimilitubis in Tylosurus annulatus and Ophicephalus striatus, Viet-Nam, Dollfus, R. P. (9); Platyhelminths from Melangalaga surtealis Senegal Dollfus, R. P. from Melanoglaea ventralis, Senegal, Dollfus, R. P. (11); Two new Schistocephalus spp. larvae in Russian fishes, Dubinina, M. N.; Helminths from fishes, fishes, Dubinina, M. N.; Freiminins from fishes, Albania, Ergens, R. (2); New Plectanocotylid trematode on Peristhedion cataphractum, Golfe du Lion, France, Euzet, L. & Trilles, J. P. (1); Two new Monogenea on Sphyraena sphyraena, France, Euzet, L. & Trilles, J. P. (2); New Calicotyle sp. from Mustelus, Charles and H. H. Mediterranean, Euzet, L. & Williams, H. H.: Diphyllobothrium medium plerocercoids in trout, Britain, Fraser, P. G. (3); Digenea and Cestoda from salmonoids in North Pacific, Fukui, T.; Ancylodiscoides from Silurids of the Far-East, Gussev, A. V. & Strelkov, J. A.; Helminths of fish acclimatised in Balkhash-Iliëk basin, Gvozdev, E. V. & Agapova, A. I.; Helminths from catfishes, Kansas, Harms, C. E.; Cardiocephalus brandesi larvae in Mugil cephalus and Menidia menidia, N. America, Hunter, W. S. & Vernberg, W. B.; Helminths from fishes, Florida, Hutton, R. F. & Sogandares-Bernal, F. (1); Monogenea from carp, Russia, Izjumova, N. A. (1); Helminths of fishes in Rybinsk Reservoir, Isjumova, N. A. (2); New Dactvlogvrid monogeneans on Indian fishes, Diphyllobothrium medium plerocercoids in trout, Britain, New Dactylogyrid monogeneans on Indian fishes, Jain, S. L.; Proteocephalus sandoni redescribed from Heterotis, Sudan, Khalil, L. F. (1); Helminths of economic fishes of Kazakhstan, Kolesnikova, M. N.; Monogenea from fishes in the eastern Indo-Pacific, Koratha, K. J. (2); Otodistomum sp. and Gyrocotyle sp. in Hydrolagus colliei, Baja California, Koratha, K. J. (3); Neodiplostomum pseudattenuatum metacercaria in brain and eyes of Scardinius erythrophthalmus, Poland, brain and eyes of scaranius eryttrophinatimus, rotania, Kozicka, J.; Metacercaria of new Tylodelphys sp in Perca, Acerina and Lota spp., Poland, Kozicka, J. & Niewiadomska, K. (1); Fishes as interhosts of Tylodelphys clavata in Polish lakes, Kozicka, J. & Niewiadomska, K. (2); Helminths from fishes, Kurašvili, B.; Odhneriotrema incommodum metacercaria in ovaries of Lepistosteus platyrhineus, Leigh, W. H.; Amphibicellid monogenegans from electric rays, Liewel-Amphibdellid monogeneans from electric rays, Llewel lyn, J.; New Proteocephalus sp. in Heterotis niloticus, Sudan, Lynsdale, J. A.; Digenetic trematodes from New Zealand fishes, Manter, H. W.; New Digenea from Hawaiian eels, Manter, H. W. & Pritchard, M. H. (1); Hemiurid trematodes from Hawaiian fishes, Manter, H. W. & Pritchard, M. H. (2), (3); New Opecoelid trematodes from Hawaiian fishes, Martin, W. E. (1); New Sanguinicolid trematode in balloon-fish Hawaii, Martin, W. E. (2); New Dacty-lostomum sp. in Pseudupeneus, Hawaii, Martin, W. E. (3); Hemiurid trematodes from marine fishes, Oregon, (a); rieminia trematores from marine inserts, fregori, mcCauley, J. E.; Helminths of cyprinisies, Kura, Mikailov, T. K.; Mazocraes alosae on Alosa spp. in the Caspian Sea, Nebol'sina, T. K.; Molluscan interhosts of Tylodelphys excavata and T. clavata, Poland, Niewiadomska, K.; Cestodes of Black Sea fishes, Pogoreltzeva, T. P.; Capsala pricei transferred to Tristomella and redescribed from giant marlin, of Panama Price, E. W. (1): Two new digenetic trema-Panama, Price, E. W. (1); Two new digenetic trematodes from Hawaiian fishes, Pritchard, M. H.; New Dactylogyrus sp. on gills of Rutilus, Poland, Prost, M.; New echinostome trematode in Amazon fish, Prudhoe, S.; Helminths from cyprinids of breeding

ponds, Poland, Radwan, S.; New Heteromicrocotyle sp. from Caranx affinis, India, Ramalingam, K. (1); New Bothriocephalid cestode in Saurida tumbil, Rao, K. H.; Digenea from fishes, Madagascar, Razari-helisa, M.; New Acanthostome metacercaria in Atherina mechan, France, Rebect, J.; Monogenea from Heterosomate in Gulf of St. Lawrence, Ronald, K. (1); Digenetic trematodes from the Heterosomata of the Gulf of St. Lawrence, Ronald, K. (3); New Dactylog yrus sp. on gills of Hybopsis, Oklahoma, Seamster, A.; Helminths of fish in reservoirs of central Kazakhstan, Sidorov, E. G. (1); Infection of fish with Opisthorchis felineus in the Pavlodarsk Province, Sidorov, E. G. (2); Nandus nandus, Belone cancilla and Ophicephalus punctatus as natural interhosts of Clinostomum piscidium, India, Singh, R. N. (8); New Diplostomulum sp. in cyprinoid fisher, Allahabad, Singh, R. N. (6); Ascocotyline metacercariae from Louisiana fishes, Sogandares-Bernal, F. & Bridgman, J. F.; Galactosomum spinetum metacercaria in Hyporhampus umifasciatus, Florida, Sogandares-Bernal, F. & Hutton, R. F. (1); New Crassicutis sp. in a sheepshead, Gulf of Mexico, Sparks, A. K. & Thatcher, V. E.; Helminths from fishes of the Upper Enisey, Russia, Spassky, A. A. & Roitman, V. A.; Helminths of marine fishes from East Kamchatka, Strelkow, J. A.; Diplostomum spathacum larvae in Leucaspius delineatus, Poland, Styzyńaka-Jurewicz, E.; Gyrodactylus on sticklebacks in laboratory aquaria, Swarup, H.; New Microcotyle sp. from Pomadasys, W. Africa, Tendeiro, J.; New amphistome trematode in Cirrhina, India, Thapar, G. S.; Digenea from Ghanian sub-littoral fishes, Thomas, J. D.; Euclinostomum multicaecum and new Thomas, J. D.; Euclinostomum multicaecum and new Clinostomum sp. in Ophicephalus, Philippines, Velasquez, C. C.; Parabothrium gadipollachii and Abothrium gadi in gadid of N.E. Atlantic, Williams, H. H. (2); Redescription of Winkenthughesis bramas from Brama raii, W. coast of Scotland, Williams, H. H. (3); Helminths from marine fishes off British Isles, Williams, H. H. (4); Redescription of lehthyotrema vogelsangi, Winter, H. A. (2); Three new cestodes from Rhinobatus schlegeli, Japan, Yamaguti, S. (2); New Pyragraphorus sp. on Carany, Pacific Ocean, Mexico, Zerecero y D., M. C.; Monogenea on fishes of the Chukotsk Peninsula, Zhukov, E. V. (1); Helminths from fishes in Sea of Japan and southern Kurile waters, Zhukov, E. V. (2).

Amphibia.—Brachycoelium obesum in Plethodom glutinosus and P. cinereus, Virginia, Cheng, T. C. (2); Trematodes from Rana tigrina in E. Pakistan, Codl, W. H. & Kuntz, R. E. (2); Helminths from Amphibia, Utah, Frandsen, J. C. & Grundmann, A. W. (2); Cestodes from Tasmanian Anura, Hickman, J. L.; Monogenea from Amphibia, Koratha, K. J. (1); Helminths from Amphibia, California, Lehrmann, D. I.; Megalodiscus microphagus in Hyla regilla, Rana aurora and Taricha granulosa, Oregon, Macy, R. W. (2); Helminths from Amphibia, Albania, Prokopič, J. (2); Metacercaria of Astiotrema monticellii in Pelobates, Rana and Hyla spp., Russia, Shevchenko, N. N. & Vergia, G. I.; Trematodes from batrachians in Estado do Pará, Brazil, Teixeira de Freitas, J. F. (3); New Opisthioglyphine trematode in amphibians, Brazil, Teixeira de Freitas, J. F. (5); New Telorchis sp. in larval salamanders, Idaho, Waitz, J. A.; New unnamed nematotaeniid cestode in Plethodon vandykei, Idaho, Waitz, J. A. & Mehra, K. N.; Anatomy of Polystoma integerimum, Williams, J. B. (1), (2); Proalaria excavata metacercaria in Rana ridibunda, Russia, Yanchev, Y. & Bozhkov, D.

Reptilia.—Cymatocarpus undulatus redescribed from Chelone mydas, Mexico, Caballero y C., E.; New

Phagicola sp. in Clemmys, Turkey, Coil, W. H. & Kuntz, R. E. (1); Three new trematodes from Pacific seasnakes, Coil, W. H. & Kuntz, R. E. (2); Oochoristica sp. in smooth green snake, Ontario, Judd, W. W.; New Ophiotaenia in night-adder, S. Rhodesia, Mettrick, D. F. (3); Telorchis assula in Natrix n. natrix, Germany, Odening, K. (4); Trematodes from snakes, Germany, Odening, K. (1), (7); Encyclometra colubrimurorum in Natrix natrix persa, Yugoslavia, Odening, K. (8); New Hemiurid trematode in lungs of sea-snake, Queensland, Sandars, D. F.; New Telorchis sp. in Kinosternon, Brazil, Teixeira de Freitas, J. F. & Dobbin, J. E. (1); New Telorchis sp. in garter snake, Idaho, Waltz, J. A.

Aves.—New Echinoparyphium sp. in a darter, India, Agarwal, S. M.; Philophthalmus sp. in Fulica americana alai, Alicata, J. E. & Noda, K.; New Euamphimenus sp. in blackbirds, Switzerland, Baer, J. G.; Dilepidid cestodes from Ardeiformes, Baer, J. G. & Bona, F.; Helminths of chickens in Alma-Ata Province, Belokobilenko, V. T.; New Hymenolopis sp. from tufted duck, Britain, Beverley-Burton, M. (1); New Dilepidid cestode from Ardea cinerea, S. Rhodesia, Beverley-Burton, M. (2); New Parallelotestis sp. in great white heron, Rhodesia, Beverley-Burton, M. (4); Helmeron, Ruddesia, Beverley-Burton, M. (2); Hei-minths from Lynnus letrix and Tetras woogalius, Poland, Bezubik, B. (2); Helminths from domestic fowls, Slovakia, Birová-Volosinovičová, V. (1); Helminths in Melegris in Slovakia, Birová-Volosinovičová, V. (2); New Cathaemasia sp. in Sphmorhynchus abdimit, (2); New Cathaemasia sp. in Sphenorhynchus abdamis, Brock, E. van den; Hyptiasmus arcuatus in domestic duck, Slovakia, Buša, V.; Trematodes from shore-birds, Washington State, Ching, H. L. (3); New Phagicola sp. in kite, Turkey, Coil, W. H. & Kuntz, R. E. (1); New Hymenolepis sp. in Mergus merganser, Poland, Czapliński, B.; Some redescription of Hymenolepis stellorae from Larus carus, Deblock, S.; Redescriptions of Maritema spp. from Charadriiforms, France Deblock, S. & Carona A. (1). New Euro-France, Deblock, S. & Capron, A. (1); New Eurycephalus sp. in Ixobrychus sp., France, Deblock, S. & Capron, A. (2); Microphallid trematodes from birds in the Pas de Calais, Deblock, S. et al.; Hymenolepis cirrosa described from Larus spp., France, Deblock, S. et al.; Cestode from birds, Peru, Dollfus, R. P. (1); Helminths from Passeriformes in the Volga Delta, Dubinina, M. N. & Kulakova, A. P.; Scaphane cephalus expansus redescribed from Pandion h. haliaetus, France. **Dubois**, G. (2); Three new Gigantobiharzia spp. in birds from Ruanda-Urundi, **Fain**, A.; New Cathaemasioides sp. in an Indian stork. **Farooqui**, H. U.; Gardian, A., New Schistoesphalus sp. in an Indian stork. Farrooqui, H. U.; New Schistoesphalus sp. in gull and tern, Michigan, Gardian, G. S.; New Pegosomum sp. in Ixobrychus minutus, Gvozdev, E. V. (1); Trematodes from birds, Florida, Hutton, R. F. & Sogandares-Bernal, F. (1); Digenea from shore-birds, Florida, Hutton, R. F. & Sogandares-Bernal, F. (2); New Paruterine cestode in teal, India, Johri, G. N. (1); New Diorchis sp. in Fulica atra, India, Johri, G. N. (2); New Hymeno-lepidid cestode in Icturus icterus, Venezuela, Jordano, D. & Diaz-Ungria, C.; Hymenolepis furcifera redescribed from Podiceps spp., Poland, Korpaczewska, W.; New Fimbriaria sp. in domestic duck, Far East, Kotel Hikov, G. A.; New Tylodelphys sp. in Podiceps spp., Poland, Kozicka, J. & Niewiadomska, K. (1); Tylodelphys clavata in Podiceps cristata and Circus aeruginosus, Poland, Kozicka, J. & Niewiadomska, K. (2); Helminths in Garrulus glandarius and Pica pica from Lublin Palatinate, Poland, Luft, K.; Platyhelminths from Ciconia nigra in eastern Slovakia, Macko, J. K. (1); Platyhelminths from Arda purpurea, eastern (1); Platyhelminths from Ardea purpurea, eastern Slovakia, Macko, J. K. (2); Redescriptions of Echinoca

y, y,

; so-

i k,d

y-

1-1, 8, 15/. i, ic - w 5,

r,

5.

a - s,

15

paryphium sinorchis and Tanaisia longivitellata from Slovakian birds, Macko, J. K. (3); New Aporchis sp. in Larus canus, Oregon, McCauley, J. E. & Partt, I. (1); New Choanolaenia sp. in Pitta angolensis, S. Rhodesia, Mettrick, D. F. (1); Two new Paruterina spp. in passeriforms, S. Rhodesia, Mettrick, D. F. (2); Helminths of birds in Hertfordshire, Mettrick, D. M. (5); Raillietina wenneri redescribed from Urocolius, S. Rhodesia, Mettrick, D. F. (6); Trematodes from birds, Germany, Odening, K. (7); New digenetic trematode in little egret, India, Pande, B. P.; Two trematodes from storks in India, Pande, B. P.; Two trematodes from storks in India, Pande, B. P.; et al.; Helminths of birds in Zaisansk depression, Russia, Panin, V. Y.; Neodiplostomum buteonis in Nystea scandiaca, Bubo virginicanus and Strix varia, Ontario, Pearson, J. C.; New Hymenosphenacanthus sp. in a black-necked swan, Schönbrunn Zoo, Vienna, Pfeiffer, H.; New Liga sp. in Aramus, Brazil, Prudhoe, S.; Trematodes from shore birds, California, Russell, H. T. (1); Helminths from Albanian birds, Ryšavý, B. (2); Trematodes from birds in Czechoslovakia, Ryšavý, B. (3); New Raillietina sp. in domestic pigeon, Japan, Sawada, I. (1); Morphology of Colugnia digonopora from Indian fowls, Siddiqi, A. H. (1); New unisexual cestode from Podiceps ruficollis, India, Siddiqi, A. H. (2); Two new Panuwa spp. in Indian birds, Singh, K. P. & Singh, K. S.; New Raillietina sp. in domestic fowls, India, Sinha, P. K. (1); Cestodes from birds, Spasskaja, L. P. & Spasský, A. A.; Intestinal trematodes in birds from Lake Goldapiwo and Lake Mamry Pólnicne, Poland, Sulgostowska, T. (1); Extra-intestinal trematodes from birds in Polish lakes, Sulgostowska, T. (2); Tanaisia inopinar redescribed from Sterna, Brazil, Teixeira de Freitas, J. F. (2); Passeriforms as experimental hosts of Posthodiplostomum minimum, Ulmer, M. J. (2); Cestodes from birds, Cuba, Vigueras, I. P.; New Eucotyle sp. in long-tailed duck, Sweden, Waldén, H. W.; Trematodes from birds spinolaetta, Britain, Willia

Marsupialia.—Helminths of Didelphis virginiana, Georgia, Babero, B. B. (2); Heptotaenia festiva in bileducts of Macropus rufus, Schott, G.

Cetacea.—New Campulid trematode in Amazon dolphin, McIntosh, A.

Ungulata.—Thysanosoma actinioides in Antilocapra americana, New Mexico, Allen, R. W. & Samson, K. S.; Trematodes of Rupicapra rupicapra caucasica in Azerbaidjan, Asadov, S. M.; Infection of muscles of roebuck with cysticerci, Boev, S. N. (2); Helminths from domestic animals, Erhardova, B. et al.; Trematodes and Cestodes of wild ruminants in Kirgizia, Gagarin, V. G.; Avitellina arctica redescribed from Rangifer, Canada, Gibbs, H. C.; Cestodes in Antilocapra americana, New Mexico, Gilmore, R. G. & Allen, R. W.; Amphistomes from domestic ruminants in the Tchad Republic, W. Africa, Gretillat, S. (2); Helminths from Cervus elaphus in Tatra National Park, Guoth, S. (1); Dicrocoelium dendriticum in Capra aegagrus, Tatra National Park, Guoth, S. (2); Cestodes of cattle in Northern Kazakhstan, Lavrov, L. I.; Amphistome trematodes from Indian elephant, Malik, B. S. et al.; Ogmocotyle indica in sheep and goats, U.P., India, Pande, B. P. & Bhatia, B. B.; Helminths from alimentary canal of cattle, W. Poland, Patyk, S.; Natural hosts of Schistosoma bovis in Somalia, Sobrero, R.; Multilocular hydatid cysts in sheep, cattle and goats, Vibe, P. P.; Morphology of Brumptia bicaudata

from elephant and rhinoceros, Willmott, S.; Helminths of pigs in Kazakhstan, Zakhryalov, Y. N.

Rodentia.—New Monoecoestus sp. in Cavia, Brazil, Arandas Rego, A.; Larvae of Taenia spp. in fieldmice, France, Bernard, J.; Trematodes of Myopotamus copyus in Belorussian fur-farm, Dilko, N. I. & Merkusheva, I. V.; Plagorchis cirratus redescribed from white mice, Dollfus, R. P. (4); Cestodes from rodents in Albania, Erhardova, B. (2); Brackylaemus microti in Peromyscus maniculatus sonoriensis, Utah, Frandsen, J. C. & Grundmann, A. W. (1); Diphyllobothrium medium obtained experimentally from rats, Franser, P. G. (3); New Hymenolepis sp. in Napaeozapus and Peromyscus, Ontario, Freeman, R. S.; Helminths of decer-mouse, Utah, Grundmann, A. W. & Frandsen, J. C. (1); Helminths of musk-rats in Kazakhstan, Gvozdev, E. V. (2); Artyfechinostomum mehrai redescribed from white rats, Jain, G. P. (2); Heterobilharzia americana in nutria, Louisiana, Malek, E. A. et al.; Helminths of rodents in Belorussia, Poland, Merkusheva, I. V.; Schistosoma mansoni in rodents, Transvaal, Pitchford, R. J. & Visser, P. S.; New Schizorchis sp. in pika, Alaska, Rausch, R. (2); Trematodes and Cestodes in Arvicola terrestris, Azerbaidjan, Sadikhov, I. A.; Trematodes and Cestodes from rodents in Venezuela, Voge, M. & Diaz-Ungria, C.; Trematodes from rodents in Poland, Zarnowski, E.

Carnivora.—Helminths from Mephitis mephitis, Louisiana, Babero, B. B. (3); New Strigeid from otter, S. Rhodesia, Beverley-Burton, M. (3); Eurytrema procyonis in domestic cat, New Jersey, Burrows, R. B. & Lillis, W. G.; Proliferating cysticercus of Taenia crassiceps in fennec fox, France, Callot, J. & Gayot, G.; Paragonimus skrjabini redescribed from Paguma, China, Chen, H. T.; Diplopylidium monophoroides in cat, Venezuela, Diaz-Ungria, C. et al.; Metorchis sp. in dog, Louisiana, Etges, F. J. & Sharrna, M. L.; Mesocestoides lineatus larvae in a dog, Poland, Fagastínski, A. & Piusiáski, W.; Heterobilharzia americana in raccoons and dogs, Louisiana, Malek, E. A. et al.; Cryptocotyle lingua in farm-mink, Britain, McTaggart, H. S.; Heterobilharzia americana in raccoon, N. Carolina, Miller, G. C. & Harkerna, R.; Helminths of dogs in Ankara, Mimioglu, M. et al.; New Concinnum sp. from Herpestes, Sumatra, Odening, K. (6), (7); Ogmocotyle ailuri in Ailurus fulgens, Price, E. W. (2); Helminths from dogs and cats in Albania. Prokopič, J. (1); Experimental infection of dogs with Echinococcus multilocularis, Vibe, P. P.

Insectivora.—Hymenolepis prolifer in Sorex aransus, Switzerland, Baer, J. & Santa, R. della; Trematodes from Insectivora in Poland, Zarnowski, E.

Chiroptera.—Digenea from bats, Panama, Caballero y C., E. & Grocott, R. G.; Trematodes from Chiroptera, Switzerland, Dubois, G. (1); Trematodes from Chiroptera, Czechoslovakia, Hurková, J.; New Hymenolepis sp. in vampire bat, India, Johri, G. N. (2); New subsp. of Plagiorchis vespertilionis in Myotis, Washington State, Macy, R. W. (1); New Lecithodendriid trematode in Brazilian bat, Teixeira de Freitas, J. F. (4); New Prosthodendrium sp. in a bat, Brazil, Teixeira de Freitas, J. F. (6); Cestodes from Microchiroptera, Czechoslovakia, Tenora, F. & Baruš, V.

Primates.—Bertiella studeri in Macacus cynomolgus, Indonesia, Bezubik, B. & Furmaga, S.; Helminths in monkeys, Graham, G. L.; Cysticercus cellulosae in Macacus cyclopis, Taiwan, Hsien-chen, H. (1); New

[

Eur

Per

563 figs

Par

P.

P. 212

Ya P.

cur

vag

on 23

24

p.

(1

cir

OI

Ja ru

C

n

aj

H

Phaneropsolus sp. in Macacus cynomolgus, Ryňavý, B. & Dudek, J.; Raillietina garrisoni in small boys, Philippines, Stransky, E. & Lorenzo, A. S.

# GEOGRAPHICAL DISTRIBUTION

Europe.—Turbellaria from maritime meadows, Germany, Ax, P.; Triclads in fauna of Wurttemberg, Becker, E.; Turbellarian fauna of Harsz Lake, Poland, Chodorowski, A. (1), (2); Trematodes from Turkey, Coil, W. H. & Kuntz, R. E. (1); Dendrocoelopsis spinosipenis from Yugoslavia and Sweden, Dahm, A. G.; Planarians in fauna of Friesland, Hartog, C. den & Tulp, A. S.; Distribution of Crenobia alpina in the Sicas Valley, Rumania, Kovats, L.; Dendrocoelium collimi in fauna of Julian Alps, Papa, R. Del; Two rhabdocoeles new to Italian fauna, Papi, F. (1); Typhloplanid turbellarians from central Italy, Papi, F. (2); Cavernicolous triclads from the Apulian region, Ruffo, S.; Distribution of triclads in the Cranbrook area, Kent, Streeter, D. T.

Africa.—Rhabdocoeles from echinoderms, Madagascar, Hyman, L. H. (2); Helminths from vertebrates in the Sudan, Myers, B. J. et al.

Asia.—Subterranean planarians from the Akiyoshi District, Japan, Kawakatsu, M.; Helminths of vertebrates on Sakhalin Is., Krotov, A. I.

N. America.—Two new marine planarians from Florida, Corrêa, D. D.; Cestodes from vertebrates in Mexico and Costa Rica, Flores-Barroeta, L. & Hidalgo-Escalante, E.; Bipali:m adventitium in the U.S.A., Klots, A. B.; Digenetic trematodes from Pacific coast of N. America, Winter, H. A. (1).

S. America.—New Didymorchis sp. from Argentina, Mañe-Garzon, F.; Turbellaria from Curaçao, Marcus, E.; Platyhelminths from domestic animals in South America, Kreis, H. A. (1); New Hoploplana sp. from Brazil, Smith, E. H.

Mediterranean,—Nemertoderma in Mediterranean, Riedl, R. (1); Callinera burgeri from the Mediterranean, Riedl, R. (2).

Atlantic Ocean.—Nemertoderma in N. Atlantic, Riedl, R. (1).

Pacific Ocean.—Polyclads from Hawaii, Hyman, L. H. (1).

Antarctica.—New Pelagonemertid from the Antarctic, Korotkevitsch, V. S.

Geological.—†Fossil Turbellaria from the Calico Mountains, California, Pierce, W. D.

# SYSTEMATIC INDEX

## **PLATYHELMINTHES**

# TURBELLARIA

Acrochordonoposthia conica Reisinger, Italy, p. 36 figs., Papi, F. (1).

Anoplodium ramosum in Stichopus variegatus, p. 3 figs., longiductum in Actinopyga sp., p. 6 figs., spp. nov., Madagascar, Hyman, L. H. (2).

Bothromesostoma pieti sp. nov., Curação, p. 41 figs., Marcus, E.

Castrada brevispina, p. 13 figs., montana, p. 21 figs., beklemischevi, p. 27 figs., spp. nov., Italy, Papi, F. (2).

Castradella Nassonov; systematic note, p. 2, lutheri sp. nov., p. 3 figs., baldii (Steinböck), p. 10 figs., Italy, Papi, F. (2).

Cleistogamia holothuriana Faust in Actinopyges echinites, Madagascar, p. 12 fig., Hyman, L. H. (2).

Dendrocoelopsis spinosipenis (Kenk) redescr., Yugo-slavia and Sweden, p. 1 figs., **Dahm**, A. G.

Dendrocoelum (Dendrocoelides) collini de Beauch., Udine, Italy, p. 56 fig., Papa, R. Del.

Didymorchis haswelli sp. nov. in branchial cavity of Parastacus saffordi, Argentina, p. 1 figs., Mañe-Garzon, F.

Digonoporus macroposthia An der Lan a probable syn. of Dendrocoelopsis spinosipenis, p. 1, Dahm, A. G.

Dugesia festai (Borelli), Curação, p. 44 figs., Marcus,

Hofstenia miamia sp. nov., Florida, p. 211 figs., Correa, D. D.

Hoploplana Laidlaw, key to spp., p. 387, usaguia sp. nov. in pallial cavity of prosobranchs, Brazil, p. 385 figs., Smith, E. H.

Mesocastrada Volz, systematic note, p. 33, fuhrmanni, Volz, Italy, p. 34 figs., Papi, F. (2).

Nemertodermatidae fam. nov., Opisthandropora-Abursatia, defined p. 247, Riedl, R. (1).

Pratoplana gen. nov., Typhloplanidae, defined, p. 228, type: P. salsa sp. nov., Germany, p. 228 figs., Ax, P.

Probursa moei sp. nov., Florida, p. 208 figs., Corrêa, D. D.

Proxenetes puccinellicola p. 222 figs., pratensis p. 223 figs., trigonus p. 225 figs., spp. nov., Germany, Ax, P.

Pseudoceros affinis (Kelaart), Hawaii, p. 309, Hyman, L. H. (1),

Stenostomum ventronephrium Nuttycombe, Italy, p. 33 figs., Papi, F. (1).

Syndesmis franciscana (Lehman) (syn. antillarum Stunkard and Corbiss) in Allocentrotus fragilis, California, p. 8, glandulosa sp. nov. in Diadema setosum, Madagascar, p. 9 figs., Hyman, L. H. (2).

Temnocephalida, morphology and biology of European forms, p. 141 figs., Matjašič, J.

Thysanozoon hawaiiensis sp. nov., Hawaii, p. 308 fig., Hyman, L. H. (1).

Vejdovskya Graff, key to spp., p. 217, halileimonia sp. nov., p. 217 figs., mesostyla hemicycla subsp. nov., p. 220 fig., Germany, Ax, P.

Xenoturbella Bock not a turbellarian, but a neotenic coelomopore larva, p. 188 figs., Reisinger, E. (1).

#### MONOGENEA

Amphibdella Chatin redefined, p. 580, torpedinis Chatin on Torpedo marmorata, diagnosis, p. 580 figs., paronaperugiae sp. nom. nov. pro A. torpedinis of Parona & Perugia (1890) and Ruszkowski (1931), on T. torpedo pp. 563, 581 figs., flavolineata MacCallum on T. nobiliana, p. 581 figs., Liewellyn, J.

Amphibdellidae Bychowsky redefined, p. 580, Llewellyn, J.

Amphibdelloides Price redefined p. 581, maccallumi (Johnst. & Tiegs) on Torpedo nobiliana p. 581 figs., vallei sp. nom. nov. pro Amphibdelloides maccallumi of

Euzet (1957) in part and Ambhibdella torpedinis of Perugia & Parona (1889), on Torpedo marmorata, pp. 563, 581 figs., narcine Hargis on Narcine brasiliensis, p. 582

figs., Llewellyn, J.

Ancylodiscoides parasiluri Yamag. on Silurus soldatovi, Parasilurus asotus, p. 201 figs., longitubus sp. nov. on S. soldatovi, p. 203 figs., soldatovi sp. nov. on S. s. and P. asotus, p. 205 figs., hamatovagina Yamag. on P. asotus, p. 208 figs., mediacanthus Achmerow on P. a. and S. s., p. 209 figs., magnicirrus sp. nov. on P. a. and S. s., p. 212 figs., macracanthus Achmerow on S. s., p. 214 figs., rarissimus sp. nov. on S. s., p. 214 figs., infundibulovagina Yamag. on P. a. and S. s., p. 216 figs., asoti Yamag. on P. a., p. 219 figs., various Achmerow on P. a., p. 219 figs., curvilamellis Achm. on P. a., p. 221, 223 figs., botulo-bagina sp. nov. on P. a., p. 224 figs., mutabilis sp. nov. on P. a., p. 224 figs., lingmoeni sp. nov. on P. a., pp. 226, 231 figs., sigmoidovagina Yamag. on P. a., p. 231 figs., cochleavagina sp. nov. on P. a., p. 234 figs., disjunctus sp. nov. on P. a., p. 235 figs., Far East, Gussev, A. V. & Strelkow, J. A.

Caballerocotyla gen. nov., Capsalinae, defined, p. 240, key to spp., p. 241, type: G. [Capsala] biparasitica (Goto), p. 240, Price, E. W. (1).

Calicotyle Dies., key to spp., p. 29, stassichii Braun redescr. from Mustelus mustelus and M. canis, p. 21 figs., palombi sp. nov. in M. mustelus and M. canis, p. 28 figs., Mediterranean, Euzet, L. & Williams, H. H.

Capsalinae Johnst. reviewed, p. 238, key to genera, p. 240, Price, E. W. (1).

Capsaloides Price, key to spp., p. 244, Price, E. W. (1).

Chauhanea mediterranea sp. nov. on gills of Sphyraena phyraena, France, p. 189 figs., Euzet, L. & Trilles, I.-P. (2).

Chauhaneinae subfam. nov., Gastrocotylidae, defined p. 194, to incl. Chauhanea Ramalingam and Pentrates Euzet & Razarihelizoa, Euzet, L. & Trilles, J.-P. (2).

Dactylogyrus calbasi on gills of Labeo calbasu, p. 161 figs., cirrhini on gills of Cirrhina reba, p. 165 figs., glossogobiis on gills of Glossogobius giurus, p. 167 figs., indicus on gills of Glossogobius giurus, p. 168 figs., spp. nov., India, Jain, S. L.; D. caballeroi sp. nov. on gills of Rutilus rutilus, Poland, p. 253 figs., Prost, M.; D. texomensis sp. nov. on gills of Hybopsis storeriana, Oklahoma, p. 269 figs., Seamster, A.

Gyrodactyloides dogieli sp. nov. on Clupea harengus, Chukotsk Peninsula, p. 321 fig., Zhukov, E. G. (1).

Gyrodactylus albaniensis on Barbus meridionalis p. 61 fig., anguilla on Anguilla anguilla, p. 62 fig., Albania, spp. nov., Ergens, R. (2); G. gymneli on Gymnelis bibabrus, p. 312 fig., ammodyti on Ammodytes h. hexapterus, p. 313 fig., ostimus on Myoxocephalus sp., p. 315 fig., spp. nov., Chukotsk Peninsula, Zhukov, E. V. (1).

Heteromicrocotyle indicus sp. nov. on gills of Caranx affinis, India, p. 34 figs., Ramalingam, K. (1).

Lamellodiscus pagrosomi Murray on Sargus annularis, Albania, p. 60 fig., Ergens, R. (2).

Mexicana gen. nov., Tetraonchinae, defined p. 172, type: M. bychowskyi sp. nov. on "Truchita" [Sciaenid], Mexico, p. 167 figs., Caballero y C., E. & Bravo-Hollis, M.

Microcotyle caballeroi sp. nov. on gills of Trachurops crumenophthalmus, Mexico, p. 87 figs., Bravo-Hollis, M.; M. eduardoi sp. nov. on gills of Pomadasys suillus, W. Africa, p. 311 figs., Tendeiro, J.

Octolabea gen. nov., Plectanocotylidae, type: tur-chinii sp. nov. on gills of Peristhedion cataphractum, France, p. 504 figs., Euzet, L. & Trilles, J. P. (1).

Paracalceostoma gen. nov., Calceostomatidae, defined p. 177, type: P. calceostomoides sp. nov. on Haemulon scudderi, Mexico, p. 173 figs., Caballero y C., E. & Bravo-Hollis, M.

Parapolystoma bulliense Johnst., some redescription, in bladder of Hyla phyllochroa, p. 344 fig., Williams, J. B.

Polystoma integerrimum (Frölich), anatomy, in Rana temporaria, England, p. 151 figs., Williams, J. B. (1).

Protopolystoma xenopi Price redescr. from Xenopus laevis, p. 337 fig., Williams, J. B. (2).

Pyragraphorus caballeroi sp. nov. on gills of Caranx hippos, Mexican Pacific, p. 345 figs., Zerecero y D., M. C.

Rhinecotyle gen. nov., Microcotylidae, type: R. crepitacula sp. nov. on gills of Sphyraena sphyraena, France, p. 194 figs., Euzet, L. & Trilles, J.-P. (2).

Tristoma Cuvier, key to spp., p. 243, Price, E. W.

Tristomella Guiart, key to spp., p. 241 [Capsala] pricei (Hidalgo) n. comb. redescr. from Makiara marlina, off Panama, p. 238 figs., Price, E. W. (1).

Winkenthughesia bramae (Parona & Perugia) redescr. from gills of Brama raii, W. coast of Scotland, p. 551 figs., Williams, H. H. (3).

### DIGENEA

Acaenodera gen. nov., Acanthocolpidae, defined p. 654, type: A. placophora sp. nov. in int. of Conger cinereus, Hawaii, p. 654 figs., Manter, H. W. & Pritchard, M. H. (1).

Acanthatrium Dollfus, constitution, p. 525, Etges, F. J. (2).

Acanthostomum pakistanensis sp. nov. in sm. int. of Hydrophis cyanocinctus, E. Pakistan, p. 282 figs., Coil, W. H. & Kuntz, R. E. (3).

Accacoeliidae Dollfus, systematics and metacercariae, p. 648 figs., Dollfus, R. P. (6).

Aephnidiogenes Nicoll, systematics, p. 323, barbarus Aspiniangenis Nicoli, systematics, p. 323, barbarus Nicoli (syn. isagi Yamag.) redescr. from Pristipoma (Pomadasis) jubelini, Ghana, p. 321 figs., rabdosargi Prudhoe transf. to Holorchis, p. 323, Thomas, J. D.; —A. dollfusi sp. nov. in Abudefduf sexfasciatus, Madagascar, p. 430 fig., Razarihelisoa, M.

Allocreadium baueri sp. nov. in Phoxinus phoxinus and P. czecanowskii, Russia, p. 185, Spassky, A. A. & Roitman, V. A.

Anaporrhutum albidum Ofenh. in Taeniura lymma, Madagascar, p. 424 figs., Razarihelisoa, M.

Anenterotrema stunkardi sp. nov. in sm. int. of Phyllo-stomus hastatus panamensis, Panama, p. 245 figs., Cabal-lero y C., E. & Grocott, R. G.

Aphanurus stossichi (Montic.) metacerc. in Sagitta bipunctata, Banyuls, p. 5 fig., Dollfus, R. P. (2).

Aponurus acanthuri sp. nov. in Acanthurus sandvicensis, Hawaii, p. 170 fig., Manter, H. W. & Pritchard, M. H. (3).

Aporchis continuus sp. nov. in int. of Larus canus, Oregon, p. 642 figs., McCauley, J. E. & Pratt, I. (1).

Ps W

p.

&

C

Artyfechinostomum Lane, reviewed, p. 1, Jain, G. P. (1).—A. mehrai (Faruqui) redescr. from white rats, India, p. 7 figs., Jain, G. P. (2).

Ascocotyle Les., systematics, p. 36, leighi Burton metacerc. in Mollienisia latipinna, Louisiana, p. 36, Sogandares-Bernal, F. & Bridgman, J. F.

Ascocotylinae Yam., key to genera, p. 36, Sogandares-Bernal, F. & Bridgman, J. F.

Ateuchocephale gen. nov., Acanthostomidae, defined p. 147, type: A marinus sp. nov. in sm. int. of Laticauda semifaciata, off Taiwan, p. 148 figs., Coil, W. H. & Kuntz, R. E. (2).

Bacciger [Monorcheides] petrowi (Layman) n. comb. redescr. from Hyposmesus olidus, Hexagrammos lagocephalus, Hemitripterus villosus and Liopsetta obscura, Sea of Japan, p. 30 fig., Zhukov, E. V. (2).

Baschkirovitrema incrassatum (Dies.) redescr. from Anonyx c. capensis and Lutra (Hydrictis) m. maculicollis, S. Rhodesia, p. 133 figs., Beverley-Burton, M. (3).

Brachycoeliidae Johnst., taxonomy, p. 162, Cheng, T. C. & Provenza, D. V. (1).

Brachycoelium obesum Nicoll cercaria and metacerc. in Zonitoides ligerus, adult in Plethodon glutinosus and P. cinereus, Virginia, Cheng, T. C. (2).

Brachylaemus attenuatus Baer in Oenanthe leucopyga, Albania, p. 199 fig., Ryšavý, B. (2).—B. futous Duj. redescr. from Sorex araneus, Poland, p. 137 fig., Zarnowski, E.

Brachylecithum attenuatum (Duj.) in Turdus merula, p. 272 fig., lobatum (Raill.) in T. merula and Corvus frugilegus, p. 273 fig., Czechoslovakia, Ryšavý, B. (3).

Brijicola gen. nov., Acanthocolpidae, type: B. caballeroi sp. nov. in bursa Fabricii of Egretta garzetta, India, p. 227 figs., Pande, B. P.

Brumptia bicaudata (Poirier) redescr. from elephant and rhinoceros, p. 623 figs., Willmott, S.

Bucephalus scorpaenae Manter in Scorpaena guttata, California, p. 183 fig., Winter, H. A. (1).

Caballeroia gen. nov., amphistome, type C. indica sp. nov. in int. of Cirrhina fulungel, India, p. 315 fig., Thapar, G. S.

Caballerotrema gen. nov., Echinostomatidae, defined p. 418, type: C. brasiliense sp. nov. in int. of Arabaima gigas, Brazil, p. 416 figs., Prudhoe, S.

Carmyerius graberi sp. nov. in Bos taurus and Ovis aries, Tchad Republic, p. 510 figs., Gretillat, S. (2).

Catatropis hisikui Yamag. in Aythya fuligula, p. 276 fig., pacifera Noble in Fulica atra, p. 277 fig., Czechoslovakia, Ryšavý, B. (3).

Cathaemasia variabilis sp. nov. in oesophagus of Sphenorhynchus abdimii, Amsterdam Zoo, p. 243 figs., Brock, E. van den.

Cathaemasioides caballeroi sp. nov. in sm. int. of Xenorhynchus asiaticus, India, p. 123 figs., Farooqui, H. U.

Cercaria papillostoma sp. nov., gorgoderid, in gills of Pisidium compressum, Oklahoma, p. 39 figs., Coll, W. H.—C. corophii Lebour in amphipods the larva of Microphallus claviformis; C. balani Lebour larva of Maritrema subdolum, C. carcini Lebour larva of Microphallus similis; C. ligiae Lebour larva of Maritrema ismilis, C. ligiae Lebour larva of Maritrema linguilla, p. 672, 673, Deblock, S.—C. roathensis sp. nov., furcocercous, pharyngeal, in digestive gland of Planorbis carinatus, Wales, p. 36 figs.,

Erasmus, D. A.—C. tranoglandis Seitner in Goniobasis livescons, Indiana, p. 227 fig., tremaglandis sp. nov. in Pleurocerca acuta, Indiana, p. 229 figs., notura sp. nov. in G. livescons, Indiana, p. 230 figs., meringura Seitner in G. l., Indiana, p. 230 figs., papiliogona sp. nov. in P. acuta, Indiana, p. 231 figs., papiliogona sp. nov. in G. l., Indiana, p. 234 figs., bryobulga sp. nov. in Goniobasis sp., Michigan, p. 235 figs., nusticoides sp. nov. in G. l., Indiana, p. 236 figs., privately sp. nov. in F. a., Indiana, p. 237 figs., celatoglandis sp. nov. in F. a., Indiana, p. 236 figs., doxevirgula sp. nov. in F. a., Indiana, p. 239 figs., celatoglandis sp. nov. in P. a., Indiana, p. 239 figs., celatoglandis sp. nov. in P. a., Indiana, p. 242 figs., virgulate xiphidiocercariae, Hall, J. E. (2).—C. londonensis echinostome, in P. andiana, p. 247 figs., deficipinnatum, echinostome, in Limnaea stagnalis, p. 283 figs., essexensis, echinostome, in Limnaea stagnalis, p. 287 figs., hamptonensis, echinostome, in P. planorbis, p. 291 figs., thamesensis, echinostome, in P. planorbis, p. 291 figs., spp. nov., London crea, khan, D. (1).—C. albinea, gymnocephalous, p. 305 figs., densacutis, gymnocephalous, p. 310 figs., spp. nov. in Bythinia tentaculata, Khan, D. (2).—C. eagbastonensis sp. nov., xiphidiocercaria, in Lymnaea stagnalis, England, p. 124 figs., Nasir, P. (2).—C. soraonensis sp. nov., Strigeid, in L. l. f. a., p. 18 figs., Allahabad, Singh, R. N. (1).—C. biocellata sp. nov., schistosome, in Indoplanorbis exustus, p. 37 figs., rithaianensis sp. nov., Strigeid, in L. l. f. a., p. 18 figs., Allahabad, Singh, R. N. (2).—C. kanharii sp. nov., schistosome, in Indoplanorbis exustus, p. 37 figs., rithaianensis sp. nov., Strigeid, in Limnaea luteola f. australis, p. 40 figs., Singh, R. N. (5).—C. planorbicola sp. nov., schistosome, in Indoplanorbis exustus, p. 37 figs., rithaianensis sp. nov., Strigeid, in Limnaea luteola f. australis, p. 40 figs., Singh, R. N. (5).—C. planorbicola sp. nov., schistosome, in Indoplanorbis

Clinostomum attenuatum Cort in Phalacrocorax auritus floridanus, Florida, p. 41 fig., Hutton, R. F. & Sogandares-Bernal, F. (2).—C. philippensis sp. nov. larva in Ophicephalus striatus, Philippines, p. 263 figs., Velasquez, C. C.

Coitocaecum cadenati sp. nov. in Melanoglaea ventralis, Senegal, p. 385 fig., Dollfus, R. P. (11).—C. anaspidis Hickman in Anguilla anguilla, Albania, p. 71 fig., Ergens, R. (2).—C. barneri in gall-bladder of Thalassoma duperry, p. 411 figs., havasimsis in gall-bl. of T. duperry, p. 412 figs., norae in gall-bl. of Ctenochastus strigosus, p. 412 figs., spp. nov., Hawaii, Martin, W. E. (1).

Concinnum dathei sp. nov. in Herpestes brachyura, p. 573 figs., Odening, K. (6).—C. dathei sp. nov. in Herpestes (Urva) brachyurus, Sumatra, p. 444 fig., Odening, K. (7).

Crassicutis archosargii sp. nov. in Archosargus probatocephalus, Louisiana, p. 341 fig., Sparks, A. K. & Thatcher, V. E.

Creptotrema mulleri sp. nov. in kidney of "Speckled trout", Turkey, p. 29 fig., Coil, W. H. & Kuntz, R. E. (1).

Cryptocotyle lingua (Creplin) in int. of Larus glaucescens, Washington, p. 53, Ching, H. L. (3).—C. lingua (Crepl.) in Larus argentatus smithsonianus, Florida, p. 46 fig., Hutton, R. F. & Sogandares-Bernal, F. (2).

Cymatocarpus undulatus Lss. redescr. from Chelone mydas, Mexico, p. 159 figs., Caballero y C., E.—C. Lss., status, spp. descr., p. 164 figs., Cheng, T. C. & Provenza, D. W. (1).

Cynodiplostomum namrui Kuntz & Chandler redescr. from Lutra (Hydrictis) m. maculicollis, S. Rhodesia, p. 131 fig., Beverley-Burton, M. (3).

Dactylostomum caballeroi sp. nov. in int. and caeca of Pseudupeneus fraterculus, Hawaii, p. 203 figs., Martin, W. E. (3).

Dihemistephanus Lss., systematic position, redefined, p. 135, lydiae (Stoss.) redescr. from Mola mola, N.Z., p. 136 figs., Peters, L. E.

Dinurinae Lss., constitution, p. 166, Manter, H. W. & Pritchard, M. H. (3).

Diplangus [Proctoeces] macrovitellus (Winter) n. comb. in Cymalogaster aggregatus, California, p. 203 fig., Winter, H. A. (1).

Diplostomulum pigmentata sp. nov. encysted in Catla catla, Labeo rohita and Cirrhina mirgala, Allahabad, p. 256 figs., Singh, R. N. (6).

Diplostomum gavium Guberlet in Podiceps cristatus, Czechoslovakia, p. 280 fig., Ryšavý, B. (3).

Dolichoenterum microtylum sp. nov. in int. of Conger cinereus, Hawaii, p. 651 figs., Manter, H. W. & Pritchard, M. H. (1).

Duosphincter gen. nov., Hemiuridae, defined p. 165, type: D. zancli sp. nov. in stom. of Zanclus canescens, Hawaii, p. 165 figs., Manter, H. W. & Pritchard, M. H. (3).

Echinoparyphium dollfusi sp. nov. in int. of Anhinga melanagaster, India, p. 322 figs., Agarwal, S. M.— E. sinorchis Oschm. redescr. from Anas querquedula, Slovakia, p. 694 fig., Macko, J. K. (3).

Echinostephilla haematopi sp. nov. in int. of Haematopus bachmani, Washington, p. 54 figs., Ching, H. L. (3).

Echinostoma nudicaudatum sp. nov., cercaria in Lymnaea stagnalis, adult exp. in pigeons, England, p. 833 figs., Nasir, P. (3).

Ectenurus lepidus Lss. in Decapterus pinnulatus and Anampses cuvisri, Hawaii, p. 168 fig., E. [Parectenurus] americanus (Manter) n. comb. and E. [Magnacetabulum] leiognathi (Yam.) n. comb., p. 168, Manter, H.eW. & Pritchard, M. H. (3).

Edeaballerotrema gen. nov., Lecithodendriidae, defined, p. 129, type: E. eduardocaballeroi sp. nov. in sm. int. of Essmopis glaucinus, Brazil, p. 129 fig., Teixeira de Freitas, J. F. (4).

Elytrophallus mexicanus Manter in int. of Pseudupeneus multifasciatus and P. chrysoneus, Hawaii, p. 96 figs., Manter, H. W. & Pritchard, M. H. (2).

Episthmium matheossianae Schacht. (syn. colymbi Schigin) in Podiceps cristatus, Poland, p. 97 figs., Sulgostowska, T. (1).

Euamphimerus pancreaticus sp. nov. in pancreatic ducts of Turdus merula, Switzerland, p. 63 figs., Baer, J. G.

Euclinostomum multicaecum Tub. & Mas. larva in Ophicephalus striatus, Philippines, p. 272 figs., Velasquez, C. C.

Eucotyle clangulae sp. nov. in kidney of Clangula hyemalis, Sweden, p. 571 figs., Waldén, H.

Eumegacetes Lss., key to spp., p. 189, indicus in rectum of Temenuchus pagodarum, p. 179 figs., longicirratus in cloaca of Hirundo smithii filifera, p. 181 fig., hirundiosus in int. of Hirundo r. rustica, p. 183 fig., megacetabulus in int. of Halycon f. fusca, p. 185 fig., hyderabadensis in int. of Lanius excubitor lahtora, p. 187 fig., spp. nov., India, Jaiswal, G. P. & Vasudev, T.—E. sp. innom. in naiads of Gomphus, Dromogomphus and Ophiogomphus (?) spp., Indiana and Michigan, p. 311 g., Hall, J. E. (1).

Eurycephalus wurtzi sp. nov. in int. of Ixobrychus minutus, France. p. 140 fig., Deblock, S. & Capron A.. (2).

Eurytrema procyonis Denton redescr. from domestic cat. New Jersey, p. 810 figs., Burrows, R. B. & Lillis, W. G.

Fellodistomum brevum sp. nov. in int. of Microstomus pacificus, N. America, p. 242 fig., Ching, H. L. (1).

Galactosomum cochleariforme (Rud.) in Fregata magnificens robschildi, p. 46 fig., sp. innom. in Larus atricilla, p. 47 fig., Florida, Hutton, R. F. & Sogandares-Bernal, F. (2).—G. humbargari Park, in int. of Larus heermanni, Larus glaucescens, Larus philadelphia, Washington, p. 53, Ching, H. L. (3).

Genarchopsis macrocotyle sp. nov. in int. of Ophiocephalus punctatus, E. Pakistan, p. 282 figs., Coil, W. H. & Kuntz, R. E. (3).

Genolinea ampladena sp. nov. in stomach of Acanthurus olivaceus, Hawaii, p. 100 figs., Manter, H. W. & Pritchard, M. H. (2).—G. lobata sp. nov. in int. of Acanthurus sandvicensis, Hawaii, p. 172 figs., Manter, H. W. & Pritchard, M. H. (3).

Gigantobilharzia Odhn., key to spp. (males), p. 302, adami in mesenteric veins of Nettapus auritus, p. 294 fig., nettapi in mesent. veins of N. a., p. 296 fig., plectropteri in portal vein of Plectropterus gambiensis, p. 299 fig., spp. nov., Ruanda-Urundi, Fain. A.

Grassitrematinae subfam. nov., Lecithasteridae, for Grassitrema Yeh, defined p. 274, Skrjabin, K. I. & Guschanskaja, L. H.

Gyliauchenidae Ozaki, systematic note, p. 337, Winter, H. A. (2).

Gymnophallus obscurus sp. nov. in int. of Haematopus bachmani, Washington, p. 60 figs., Ching, H. L. (3).

Haematoloechinae Freitas & Lent, key to genera, p. 451, Odening, K. (9).

Helicometra dochmosorchis sp. nov. in int. of Gymnothorax buroensis, Hawaii, p. 653 fig., Manter, H. W. & Pritchard, M. H. (1).

Helicometrina Linton, systematic note, elongata Noble & Park and orientalis Srivastava syns. of nimia Linton, p. 13, Deelman, J. J.—H. quadrorchis sp. nov. in int. of Gymnothorax huroensis, G. steindachneri, Hawaii, p. 653 figs., Manter, H. W. & Pritchard, M. H. (1).—H. elongata Noble & Park in Girella nigricans and Gibbonsia metzi, p. 194 fig., nimia Linton in Scorpaenichthys marmoratus, p. 195 fig., California, Winter, H. A. (1).

Hemiurus communis Odhner, original specimens from Salmo trutta and Raniceps raninus, Sweden, p. 705 figs., Dollfus, R. P. (7).

Hexangium sigani Goto & Ozaki, in Holocentrus sammara, Madagascar, p. 421, Razaribelisoa, M.

Hunterotrema gen. nov., Campulidae, defined, p. 208, type: H. caballeroi sp. nov. in bronchial mucus of Inia geoffrensis, S. America, p. 207 fig., McIntosh, A.

Hydrophitrema gen. nov., Hemiuridae, defined pl 263, type: H. gigantica sp. nov. in lungs of Hydrophis elegans, Queensland, p. 264 figs., Sandars, D. F.

Hypertrema gen. nov., Fellodistomatidae, type: H. ambovatum sp. nov. in int. of Simenchelys parasiticus, New Zealand, p. 198 figs., Manter, H. W.

Hyptiasmus arcuatus (Stoss.) redescr. from domestic duck, Slovakia, p. 546 figs., Buša, V.

to

R

0

I

Hysterolecitha tinkeri sp. nov. in int. of Pomacentrus inornatus and Abudefduf abdominalis, Hawaii, p. 99 figs., Manter, H. W. & Pritchard, M. H. (2).—H. tinkeri Manter & Pritchard in Chaetodon fremblii, Hawaii, p. 173, Manter, H. W. & Pritchard, M. H. (3).

Hysteromorpha triloba (Rud.) in Phalacrocorax auritus floridanus, Florida, p. 50 fig., Hutton, R. F. & Sogandares-Bernal, F. (2).

Ichthyotrema vogelsangi Cab. & Bravo redescr. from Prionurus punctatus, Baja California, Mexico, p. 339 fig., Winter, H. A. (2).

Labrifer tertius sp. nov. in int. of Thalassoma duperrey and Bodianus bilunculatus, Hawaii, p. 248 figs., Pritchard, M. H.

Lecithaster stellatus Lss. (syn. sayori Yam.) in Acanthurus olivaceus and A. sandvicensis, Hawaii, p. 173, Manter, H. W. & Pritchard, M. H. (3).

Lecithasterinae Odhner, constitution, p. 98, Manter, H. W. & Prichard, M. H. (2).

Lecithochiriinae Lühe, constitution, p. 88, Manter, H. A. & Pritchard, M. H. (2), p. 174, Manter & Pritchard, M. H. (3).

Lecithochirium Lühe differentiated from Sterrhurus, p. 90, microstomum Chandler (syn. sinaloense Bravo H.) in Pseudupeneus multifasciatus, Hawaii, p. 94 figs., longicaudatus Yam. and carangis Yam. transf. to Plerurus, p. 91, exodicus McFarlane and genypteri Manter transf. to Separogermiductus, p. 92, Manter, H. W. & Pritchard, M. H. (2).—L. magnaporum Manter in Dactyloptena orientalis, p. 174, microstomum Chandler in Dascyllus, Chaetodon, Hemitaurichthys, Bodianus spp., p. 175, spiravesiculatum [also spelt spiravesiculatum] sp. nov. in Gymnothorax undulatus, p. 176 figs., Hawaii, Manter, H. W. & Pritchard, M. H. (3).—L. aff. microstomum Chandler in Bothus pantherinus, Madagascar, p. 422 figs., Razarihelisoa, M.

Lecithocladium chingi sp. nov. in Acanthurus mata, Naso sp., Melichthys vidua, Hawaii, p. 168 figs., Manter, H. W. & Pritchard, M. H. (3).

Lecithodendriinae Lühe, systematic note, p. 71, Dubois, G. (1).

Lecithodendrium Lss. revision, p. 48, key tp spp., p. 60 (L.) modlingeri Pande in Eptesicus, Nyctalus, Pipistrellus, Miniopterus and Tadarida spp., Switzerland, p. 17 fig., (L.) 75829; sp. nov. (=L. linstowi of Ryšavý, 1954), p. 59, Dubois, G. (1).

Lepidapedon microcotyleum (Odhn) redescr. from Theragra chalcogramma, N. America, p. 244 fig., Ching, H. L. (1).—L. hancocki Manter in Epinephelus analogus, Mexico, p. 189 fig., Winter, H. A. (1).

Lepocreadium Stoss., constitution, p. 275, trullaforme Linton redescr. from Trichiurus lepturus, p. 276 fig., caballeroi sp. nov. in Menticirrhus saxatilis, p. 278 fig., opsanusi sp. nov. provis in Opsanus beta, p. 279 fig., archosargi Pearse in Archosargus probatocephalus, p. 280 figs., priforme (Linton) in Paliuruichlys perciformis, p. 280 fig., trulla Linton in Ocyurus chrysurus, p. 282 figs., N. Atlantic, Sogandares-Bernal, F. & Hutton, R. F. (2).

Leptophallus nigrovenosus (Bellingham) redescr. from Vipera berus and Natrix natrix, Germany, p. 328 figs., Odening, K. (1).

Leucochloridium holostomum (Rud.) in Fulica atra, Czechoslovakia, p. 280 fig., Ryšavý, B. (3).

Levinseniella propinqua Jägerskiöld in int. of Haematopus bachmani, Washington, p. 58, Ching, H. L. (3).

Lomasoma stefanskii sp. nov. in Solea solea, Mediterranean, p. 188 figs., Dollfus, R. P. (8).

Lyperosomum longicauda (Rud.) in Corvus frugilegus, Czechoslovakia, p. 274 fig., Ryšavý, B. (3).

Maicuru gen. nov., Plagiorchiidae, defined, p. 1, type: M. solitarium sp. nov. in int. of Bufo granulosus, Brazil, p. 3 fig., Teixeira de Freitas, J. F. (5).

Maritrema humile Nicoll in Tringa totanus, p. 24 figs., linguilla Jägersk. in Charadrius hiaticula, Actitis hyboleucos, p. 29 figs., subdolum Jägersk. in C. h., A. h., Erolia alpina, Lanus ridibundus, p. 32 figs., France, Deblock, S. & Capron, A. (1).—M. galloprovincials sp. nov. metacercaria in Gammarus pulex, France, p. 329 figs., Timon-David, J. (1).

Mesocoelium Odhner, reviewed, p. 439 figs., schwetzi Dollfus a syn. of mesocoelium (Cohn) p. 462, Cheng, T. C. (1).

Mesostephanus appendiculatoides (Price) in Pelecanus occidentalis carolinensis, larva in Mugil cephalus, M. curema, M. trichodon, Florida, p. 49 fig., Hutton, R. F. & Sogandares-Bernal, F. (2).—M. [Cercaria] kentuckiensis (Cable) n. comb., cercaria in Goniobasis livescens, metacercaria in fishes and tadpoles, adult exp. in Gallus domesticus, Ohio, Myer, D. G.

Mesotretes peregrinus Braun in Rhinolophus ferrumequinum, R. hipposideros and Miniopterus schreibersi, p. 29 fig., Czechoslovakia, Hůrková, J.

Metacercaria sagittae sp. nov. in Sagitta inflata, Algeria, p. 15 fig., Dollfus, R. P. (2).

Metorchis albidus (Braun) forma minor Dollfus & Callot in Neomys fodiens, Poland, p. 164, Zarnowski, E.

Microphallus primas (Jägerskiöld) in int. of Haematopus bachmani, Washington, p. 58, Ching, H. L. (3).

Musculosesicula bilabiata, sp. nov. in int. of Conger cinereus, Hawaii, p. 96 figs., Manter, H. W. & Pritchard, M. N. (2).

Nagmia Nagaty a syn. of Petalodistomum Johnston, p. 199, Winter, H. A. (1).

Neodiplostomum corvinum sp. nom. nov. pro krausei (Dubois) of Dubinin & Dubinina, 1940, p. 350 fig. Dubinina, M. N. & Kulakova, A. P.—N. pseudattenuatum (Dubois) (syn. N. scardinii Schulman) metacere. in eyes and brain of Scardinius erythrophthalmus, Poland, p. 369 figs., Kozicka, J.

Neoglyphe Shaldybin a syn. of Lecithopyge Perkins, p. 116, Dollfus, R. P. (10).

Neolepidapedon [Lepocreadium] retrusum (Linton) n. comb. in Pneumatophorus grex, Massachusetts, p. 282 fig., Sogandares-Bernal, F. & Hutton, R. F. (2).

Neolepocreadium gen. nov., Lepocreadiidae, defined p. 327, type: N. caballeroi sp. nov. in int. of Trachinotus goreensis, Ghana, p. 326 figs., Thomas, J. D.

Neoprosthodendrium gen. nov., Lecithodendriidae, defined, p. 309 type: progeneticum sp. nov. in haemocoele of naiad of Hetaerina americana, Indiana, p. 310 figs., Hall, J. E. (1).

Notocotylus gibbus (Mehlis) in Fulica atra and Gallinula chloropus, p. 275 fig., urbanensis Cort in Vanellus vanellus, p. 275 fig., Czechoslovakia, Ryšavý, B. (3).—N. minutus sp. nov. cercaria in Hydrobia minuta, adult in Somateria mollissima, N. America, p. 803 figs., Stunkard, H. W. (2).

Ochoterenatrema caballeroi Freitas in Molossops planirostris paranus, Brazil, p. 131, Teixeira de Freitas, J. F. (4). Ogmocotyle ailuri (Price) (syn. Ogmogaster ailuri Price) redescr. from Ailurus fulgens, Nat. Zool. Park, Washington, p. 119 g., Price, E. W. (2).

Opechona parvasoma sp. nov. in int. of Sebastodes melanops, N. America, p. 243 fig., Ching, H. L. (1).—O. xesuri Yamaguti transf. to Preptetos, p. 247, Pritchard, M. H.

Opecoelus lanceolatus sp. nov. in int. of Mulloidichthys samoensis, Hawaii, p. 414 figs., Martin, W. E. (1).

Opegaster ditrematis Yamag. in Moringua javanica, Myrichthys maculosus, Hawaii, p. 652 fig., Manter, H. W. & Pritchard, M. H. (1).

Ophiotreminoides gen. nov., Acanthocolpidae, defined p. 146, type: O. orientalis sp. nov. in sm. int. of Laticauda colubrina, off Taiwan, p. 146 fig., Coil, W. H. & Kuntz, R. E. (2).

Opisthioglyphe Lss., systematics, p. 343, key to spp. of subgenus (O.) p. 346, ranae (Fröl.) redescr. from Vipera berus, Germany, p. 341 figs., Odening, K. (1).—O. megastoma Baer forma major Timon-David metacercaria in Gammarus pulex, France, p. 332 figs., Timon-David, J. (1).—O. Lss., systematics p. 151, re-defined, p. 156, (O.) locellus Kossack in Neomys fodiens, p. 157 fig., (R.) exasperatum (Rud.) in Sorex araneus, S. minulus, Crocidura leucodon, p. 160 fig., (R.) opisthovitellinus (Soltys) in S. araneus, p. 161 fig., Poland, Zarnowski, E.

Opisthioglyphinae Dollfus, constitution, p. 113, key to spp., p. 114, **Dollfus**, R. P. (10).

Opisthorchioidea, key to cercariae, host-list, p. 44, Dunagan, T. T.

Pachytrema sanguineum (Linton) in Larus atricilla, Florida, p. 50 fig., Hutton, R. F. & Sogandares-Bernal, F. (2).

Parabascus semisquamosus (Braun) redescr. from Nyctalus n. noctula, Switzerland, p. 26, **Dubois**, G. (1).—P. lepidotus Lss. in Pipistrellus pipistrellus, Czechoslovakia, p. 33 fig., **Hårkovå**, J.

Paracardicola gen. nov., Sanguinicolidae, defined p. 648, type: P. hawaiensis sp. nov. in mesenteric veins of Tetraodon hispidus, Hawaii, p. 648 figs., Martin, W. E. (2).

Paracoenogonimus stresemanni sp. nov. in Abdimia abdimii, Berlin Zoo, p' 442 fig., Odening, K. (7).

Paracryptogonimus mexicanus Bravo in Cirrhitus rivulatus, California and Mexico, p. 198 fig., Winter, H. A. (1).

Paragonimus Braun, systematic note, p. 35, skrjabini Chen redescr. from Paguma larvata, China, pp. 28, 35 figs., Chen, H. T.

Parallelotestis kafuensis sp. nov. in gall-bladder of Egretta alba melanorhyncha, N. Rhodesia, p. 268 figs., Beverley-Burton, M. (4).

Parascocotyle diminuta (Stunkard & Haviland) in Phalacrocorax auritus floridanus, Hydranassa tricolor ruficollis, larva in Fundulus similis, Florida, p. 45 fig., Hutton, R. F. & Sogandares-Bernal, F. (2).—P. diminuta Stunkard & Haviland metacerc. encysted on gills of Cyprinodon, Fundulus, Lucania and Mollienisia spp., Louisiana, p. 32 fig., Sogandares-Bernal, F. & Bridgman, J. F.

Paratanaisia gen. nov., Tanaisiinae, defined, type: P. bragai (Santos), to incl. confusus Freitas, and robusta Freitas, p. 4, Teixeira de Freitas, J. F. (2).

Paryphostomum mehrai Faruqui transf. to Artyfechino-stomum, p. 3, Jain, G. P. (1).

Pegosomum ixobrychi sp. nov. in Ixobrychus minutus, Kazakhstan, p. 54 fig., Gvozdev, E. V. (1).

Petalodistomum pacificum Caballero in Galeorhinus zyopterus, Mexico, p. 199 fig., Winter, H. A. (1).

Pfenderius papillatus (Cobbold) in Indian elephant, p. 12 figs., heterocaeca Fukui in Ind. elephant, p. 14 fig., Malik, B. S. et al.

Phagicola micracantha sp. nov. in int. of Clemmys caspica rivulata and Milbus migrans, Turkey, p. 31 figs., Coil, W. H. & Kuntz, R. E. (1).—P. longa (Ransom) in Pelecanus occidentalis carolinensis, Casmerodius albus egretta, larva in Mugil cephalus, M. curema and M. trichodon, Florida, p. 44 fig., Hutton, R. F. & Sogandares-Bernal, F. (2).

Phaneropsolus magnitesticulatus sp. nov. in Macacus cynomolgus, India, p. 287 fig., Ryňavý, B. & Dudek, J.

Philophthalmus sp. innom. cercaria in Tarebia granifera mauiensis and Melanoides neucombi, adult experimentally in conjunctival sac of chicks and ducklings, naturally in Fulica americana alai, Hawaii, p. 67 figs., Alicata, J. E. & Noda, K.

Pintnaria Poche a syn. of Mesocoelium, p. 462, Cheng, T. C.

Plagiorchis vespertilionis parorchis subsp. nov. cercaria in Lymnava stagnalis, metacerc. experimentally in insect larvae, adult (nat.) in Myotis lucifugus alascensis, (exp.) in Mus musculus, Washington State, p. 337 figs., Macy, R. W. (1).—P. laricola Skrj. in Larus ridibundus, Czechoslovakia, p. 271 fig., Ryšavý, B. (3).—P. stefanskii Furmaga, in Apodemus agrarius, Poland, p. 140 fig., Zarnowski, E.

Plenosoma gen. nov., Microphallidae, defined p. 59, type: P. minimum sp. nov. in int. of Haematopus bachmani, Washington State, p. 58 fig., Ching, H. L. (3).

Plicatrium gen. nov., Hemiuridae, defined p. 89, type: P. [Lecithochirium] lycodontis (Myers & Wolfgang, 1953), p. 89 figs., Manter, H. W. & Pritchard, M. H. (2).

Podocotyle sinusacca sp. nov. in int. of Leptocottis armatus, N. America, p. 245 figs., Ching, H. L. (1).

Podocotylidae fam. nov., Podocotyloidea, for Podocotyle (Duj.), p. 101, Dollfus, R. P. (3).

Preptetos gen. nov., Lepocreadiidae, defined, p. 247, type: P. caballeroi sp. nov. in int. of Naso hexacanthus, Hawaii, p. 245 fig., Pritchard, M. H.

Proechinocephalus Srivastava a syn. of Parallelotestis Belopolskaja, p. 270, Beverley-Burton, M. (4).

Prosorhynchus pacificus Manter in Epinephelus analogus, Mexico, p. 187 fig., Winter, H. A. (1).

Prosthodendrium (P.) Dollfus, 1931, revision of subgenus, p. 28, key to spp., p. 44, ascidia (v. Ben.) in Myotis m. mystacinus, p. 8 fig., chilostomum (Mehlis) in Miniopterus s. schreibersi and Nyctalus n. noctula, p. 11 fig., aelleni Dubois in Eptesicus n. nilssoni, p. 14, hurkovaae sp. nov. in Myotis d. daubentoni, p. 15 figs., Switzerland, Dubois, G. (1).—P. (Acanthatrium) anaplocamus sp. nov. cercaria in Anaplocamus dilatatus, metacercaria in Hexagenia bilineata, adult experimentally in mice, Virginia, p. 233 figs., Etges, F. J. (1).—P. Dollfus a subgenus of Acanthatrium, p. 525. Etges, F. J. (2).—P. (P.) carolium Hurkova, 1959, in Myotis daubentoni, Czechoslovakia, p. 31, Hurkova, J.—P. conturbatum sp. nov. in int. of Molossus major crassicaudatus, Brazil, p. 265 figs., Teixeira de Freitas, J. F. (6).

Prudhoella gen. nov., Diplostomatidae, defined p. 129, type: P. rhodsiensis sp. nov. in sm. int. of Lutra (Hydrictis) m. maculicollis and Aonys c. capensis, S. Rhodcaia, p. 129 figs., Beverley-Burton, M. (3).

Pseudascocotyle gen. nov., Heterophyidae, type: P. mollienisicola sp. nov. metacercaria encysted in Mollimisia latipima, Louisiana, p. 33 figs., Sogandares-Bernal, F. & Bridgman, J. F.

Pseudocreadium elongata Nagaty transf. to Prepietos, p. 247, Pritchard, M. H.

Pseudodiscus hawkesii (Cobbold) in Indian elephant, p. 15 figs., Malik, B. S. et al.

Pseudoneodiplostomum Dubois, constitution, p. 119, key to spp., p. 120, synonymy of siamense (Poirier), p. 121, **Dubois**, G. (3).

Pseudopecoeloides tenuoides ep. nov. in int. of Priacanthus cruentatus, Hawaii, p. 414 figs., Martin, W. E. (1).

Pulmovermis gen. nov., Hemiuridae, defined p. 148, type: P. cyanovitellosus sp. nov. in lungs of Laticauda semifasciata, off Taiwan, p. 150 figs., Coll, W. H. & Kuntz, R. E. (2).

Pycnoporus Lss. revision, p. 61, key to spp., p. 70, macrolaimus (v. Linst.) in Pipistrellus k. kuhli, Nyctalus n. noctula, p. 21 figs., [Lecithodendrium] megacotyle (Ogata) n. comb. in N. n. n, p. 24 figs., Switzerland, [Lecithodendrium] rhinolophi (Ogata) n. comb. p. 66, Dubois, G. (1).—P. heteropus (Duj.) in Pipistrellus pipistrellus, Vespertilio discolor, p. 31 fig., sp. innom. in Barbastella barbastella, p. 32 fig., Czechoslovakia, Hárková, J.

Rhipidocotyle [Bucephalopsis] scombropis (Yamag.) n. comb. redescr. from Trichiurus japonicus, Sea of Japan, p. 10 fig., Zhukov, E. V. (2).

Schistosoma spindalis Montg. miracidium descr., p. 29 figs., Singh, R. N. (3).

Separogermiductus Skrj. & Gusch., systematic note, p. 91, congeri sp. nov. in int. of Conger cinereus, Hawaii, p. 92 figs, Manter, H. W. & Pritchard, M. H. (2).

Skrjabinovermis vesiculata Belopolskaya a syn. of Echinostephilla virgula Lebour, p. 57, Ching, H. L. (3).

Stenocollum fragile (Linton) a syn. of Dihemistephanus lydiae (Stossich), p. 528 figs., Dollfus, R. P. (5).

Stephanoprora denticulata (Rud.) in Larus argentatus smithsonianus, Florida, p. 51 fig., Hutton, R. F. & Sogandares-Bernal, F. (2).

Stephanostomum californicum Manter & Van Cl. in Genyonemus lineatus, California, p. 191 figs., Winter, H. A. (1).

Sterrhurus Lss., differentiated from Lecithochirium, p. 90, macrorchis Crowcroft and magnatestis Park transf. to Separogermiductus, p. 92, goslinei sp. nov. in int. of Conger cinereus, Hawaii, p. 95 figs., Manter, H. W. & Pritchard, M. H. (2).—S. cirrhiti sp. nov. in Cirrhitus alternatus, Hawaii, p. 178 figs., Manter, H. W. & Pritchard, M. H. (3).

Tanaisia longivitellata Strom redescr. from Porzana porzana, Slovakia, p. 696 figs., Macko, J. K. (3).—
T. atra (Neslobinsky) (syn. longivitellata Strom) in Fulica atra and Sterna hirundo, Poland, p. 480, Sulgostowska, T. (2).—T. inopina Freitas redescr. from Sterna sp., Brazil. p. 2 fig., bragai Santos, confusa Freitas, robusta Freitas transf. to Paratanaisia, p. 4, Teixeira de Freitas, J. F. (2).

Telorchis diaphanus sp. nov. in large int. of Kinosternon s. scorpioides, Brazil, p. 191 figs., Teixeira de Freitas, J. F. & Dobbin, J. E. (1).—T. bonnerensis sp. nov. in sm.

int. of Thamnophis sirtalis and larval Ambystoma macro-dactylum, Idaho, p. 815 figs., Waitz, J. A.

Tergestia Stossich, systematic note, p. 83, haswelli Dollfus cercaria, original material redescribed from Mytilus canalicatus, N.Z., p. 75 figs., Angel, L. M.

Timoniella gen. nov., Acanthostomatidae, defined, p. 262, type: T. atherinae sp. nov. metacercaria encysted in Atherina mochon, France, p. 257 figs., Rebecq, J.

Tricotyledonia genypteri Fyfe a syn. of Grassitrema prudhoei Yeh, p. 271 figs., Skrjabin, K. I. & Gushanskaja, L. H.

Tubulovesicula angusticauda (Nicoll) in Conger cinereus, Hawaii, p. 179 figs., Manter, H. W. & Pritchard, M. H. (3).—T. lindbergi (Layman) redescr. from Leptocottus, Psettichthys, Platyichthys, Citharichthys, Anoplarches, Enophrys, Ophiodon, Oncorhynchus and Lepidopsetta spp., Oregon, p. 87, McCauley, J. E.

Tylodelphys Dies. redefined p. 33, podicipina sp. nov. in sm. int. of Podiceps cristatus, P griseigena, P. nigricollis, p. 25 figs., metacerc. in eyes of Perca fluviatilis, Acerina cernua, Lota lota, p. 28 figs., Poland, Kozicka, J. & Niewiadomska, K. (1).—T. clavata (Nordm.) (syn. T. conifera (Mehlis)) experim. life-history, metacercaria in eyes of Perca fluviatilis, etc., adult in Podiceps cristatus and Circus aeruginosus, Poland, p. 379 figs., Kozicka, J. & Niewiadomska, K. (2).—T. excavata (Rud.) cercaria in Coretus cornus, metacerc. experimentally in Rana esculenta, p. 427 figs., clavata (Rud.) (= Cercaria letifera Fuhrm.) in Radix ovata, p. 433 figs., Poland, Niewiadomska, K.

Typhlocoelum Stoss., systematic note, p. 250, subspeciation in cucumerinum (Rud.), p. 259, Macko, J. F. & Buša, V.

Urotocus Las., systematic note, p. 82, rossittensis (Mühling) in Anthus spinoletta petrosus, Britain, p. 65 figs., Williams, I. C.

Urotrema scabridum Braun redescr. from Phyllostomus hastatus panamensis, Panama, p. 244 fig., Caballero y C., E. & Grocott, R G.

Uterovesicularis Skrj. & Gusch. a syn. of Erilepturus Woolcock, p. 174, Manter, H. W. & Pritchard, M. H. (3).

Xystretrum caballeroi Bravo in Balistes and Sphaeroides spp., California and Mexico, p. 201 fig., Winter, H. A. (1).

#### CESTODA

Abothrium gadi v. Ben. in Gadus pollachius, G. callarias and G. aeglifinus, N.E. Atlantic, p. 304 figs., Williams, H. H. (2).

Acanthobothrium rhinobati Alex. redescr. from Rhinobatus schlegeli, Japan, p. 45 figs., Yarnaguti, S. (2).

Anomotaenia Cohn redefined, p. 18 [Choantaenia] ricci (Fuhrm. & Baer) n. comb. in Sphernorlynchus abdimii, p. 18, Baer, J. G. & Bonas, F.—A. mutabilis (Rud.) in Crotophaga ani, Cuba, p. 388 figs., Vigueras, I. P.

Anonchotaenia jeandorsti in Tyrannus m. melancholicus, p. 384 figs., zonotrichicola in Zonotrichia capensis peruviensis, p. 388 figs., **spp. nov.**, Peru, **Dollfus**, R. P. (1).

Aploparaksis furcigera (Rud.) larva in Limnodrilus sp., Poland, p. 62 fig., Jarecka, L. (1).

Avitellina arctica Kolmakov redescr. from Rangifer a. arcticus, Canada, p. 624 figs., Gibbs, H. C.

70-

elli

om

ed

n-

us, d,

tta

v.

n.

ia

is

Baerietta criniae sp. nov. in duodenum and ileum of Crinia tasmaniensis, p. 10 figs., c. criniae subsp. nov. in C. t., p. 11, c. minor subsp. nov. in C. t., C. signifera, C. laevis, p. 18, Hickman, J. L.

Catenotaenia (C.) cricetorum f. glareolica form. nov. in Clethrionomys glareolus, p. 1328, (Spasskijela) kratochvili sp. nov. in Apodemus flavicollis, p. 1329 figs., Russia, Tenora, F. (1).

Catenotaeniidae Spassky, classification, p. 1322 figs., Tenora, F. (1).

Choanotaenia angolensis sp. nov. in Pitta angolensis, S. Rhodesia, p. 398 figs., Mettrick, D. F. (1).—C. crassiscolex (Linst.) cysticercoid in digestive gland of Oxychilus cellarius, Britain, p. 453 figs., Rawson, D. & Rigby, I. E.

Clelandia Johnst. defined p. 20, Baer, J. G. & Bona, F.

Cotugnia digonopora Pasquale redescr. from fowls, India, p. 371 figs., Siddiqi, A. H. (1).

Craspedocotyla gen. nov., Hymenolepididae, defined pp. 198, 208, type: C. margaritensis sp. nov. in int. of Icterus icterus, Venezuela, p. 199 figs., Jordano, D. & Diaz-Ungria, C.

Cyclorchida Fuhrm. (syn. Vogea Johri) redefined, p. 14, Baer, J. G. & Bona, F.

Cyclustera Fuhrm. redefined, p. 16, Baer, J. G. & Bona, F.—C. capito (Rud.) in Ajaia ajaja and Guara alba, Cuba, p. 386 figs., Vigueras, I. P.

Dendrouterina Fuhrm. redefined, p. 12, list of spp., p. 12, australensis sp. nov. in Ardea pacifica?, Australia, pp. 13, 40 fig., [Dilepis] macrosphincter (Fuhrm.) n. comb. in Ardeola, Ardea, Nycticorcax spp., p. 12, [Cyclustera] fuhrmanni (Clerc) n. comb. in Botaurus spp., Ixobrychus e. exilis, p. 12, [Dilepis] papilifiera (Fuhrm.) n. comb. in Hydranassa coerula, p. 13, [Dilepis] crassirostris (Fuhrm.) n. comb. in Tigrisoma brasiliense, p. 13, Baer, J. G. & Bona, F.

Dicranotaenia coronula (Duj.) larva in Cyclocypris laevis, Dolerocypris fasciata, Poland, p. 61, Jarecka, L. (1).

Dilepis Weinland redefined, p. 18, Baer, J. G. & Bona, F.—D. tetraorchida sp. nov. in Pandion haliaetus carolinensis, Cuba, p. 391 figs., Vigueras, I. P.

Diorchis stefanskii Czapl. larva experim. in Dolerocypris fasciata, p. 61, Jarecka, L. (1).—D. balacea sp. nov. in Fulica atra, India, p. 251 figs., Johri, G. N. (2).

Diplopylidium monophoroides Lopez-Neyra redescr. from cat, Venezuela, p. 67 figs., Diaz Ungria, C. et al.

Drepanidotaenia bisacculina Szpot. larva in Acanthocyclops viridis, Poland, p. 56 figs., Jarecka, L. (1).

Echeneibothrium rhinobati sp. nov. in spiral valve of Rhinobatus schlegeli, Japan, p. 43 figs., Yamaguti, S. (2).

Finbriaria amurensis sp. nov. in domestic duck, cysticercoid in Sinodiaptomus sarsi, Mesocyclops leuckarti and Eucyclops serrulatus, Far East, p. 133 fig., Kotel' Hikov. G. A.

Grillotia sp. innom., plerocercus in Melanoglaea ventralis Senegal, p. 388 fig., **Dollfus**, R. P. (11).

Hymmolepis prolifer Villot (syns.: H. curiosa Stammer, Pseudodiorchis multispinosa Zarn. and P. kampinosi Rybicka) descr. from Sorex araneus, Switzerland, p. 71 figs., Baer, J. & Santa, E. della.—H. mandabbi sp. nov. in Aythya fuligula, Britain, p. 560 figs., Beverley-Burton, M. (1).—H. vistulae sp. nov. cysticercoid experim. in Cyclops s. stremus, adult nat. in int. of Mergus merganser, Poland, p. 299 figs., Capliński, B.—H. stellorae Deblock,

Biguet & Capron in Larus camus, p. 757 figs., Deblock, S.—H. Weinland, key to spp. from Lariformes, p. 566, charadrii (Yamag.) n. comb. redescr. from Larus ridibundus, p. 539 figs., lauriei Davies redescr. from L. r., p. 547 figs., stellerae sp. nov. in L. r., p. 548 figs., France, p. 648 figs., France, p. 649 figs., Set al.—H. [Aploparaksis] cirrosa (Kr.) n. comb. (syn. H. neoarctica Davies) redescr. from Larus ridibundus and L. canus, France, p. 58 figs., Deblock, S. et al.—H. bennetti sp. nov. in Napaeozapus insigni algonquinensis and Peromyscus maniculatus gracilis, Ontario, p. 737 figs., Freeman, R. S.—H. multistriata (Rud.) cysticercoid in larvae of Cloen sp., Russia, p. 287 fig., Golikova, M. N.—H. cequabilis (Rud.) larva in Cyclecypris laevis, p. 55 figs., macrocephala Fuhrm. larva in Notodromas monacha, C. laevis, p. 57 figs., sacciperium Mayhew, larva experim. in C. laevis, p. 59 figs., sacciperium Mayhew, larva experim. in C. laevis, p. 59 figs., sacciperium dopsis vidua and Dolerocypris fasciata p. 61 figs., Poland, Jarecka, L. (1).—H. minimedius sp. nov. in Pteropus medius, India, p. 251 figs., Johrl, G. N. (2).—H. funcifera (Kr.), systematic note, redescr. from Podiceps cristatus and P. griseigena, Poland, p. 461 figs., Korpaczewska, W.—H. ardeae Fuhrm. in Butorides virescens maculatus, p. 393 figs., almiquii sp. nov. in Atopogale cubana, p. 394 figs., Cuba, Vigueras, I. P.

Hymenosphenacanthus bulbocirrosus sp. nov. in Cygnus melanocoryphus, Schönbrunn Zoo, Vienna, p. 345 figs., Pfeiffer, H.

Inermicapsifer Janicki, speciation, p. 137, Mettrick, D. F. & Weir, J. S.—I. (Raillietina) tetragona Molin in Gallus gallus, Costa Rica, p. 365 figs., (Raillietina) formosana (Akashi) in Oryzomys sp., Mexico, p. 366 figs., Flores-Barroeta, L. & Hidalgo-Escalante, E.

Lallum gen. nov., Paruterinae, type: L. magniparuterinas sp. nov. in Nettion crecca, India, p. 269 figs., Johri, G. N. (1).

Liga woodlandi sp. nov. in Aramus scolopaceus, Brazil, p. 418 figs., Prudhoe, S.

Mashonalepis gen. nov., Dilepidinae, defined p. 487, type: M. dafyddi sp. nov. in int. of Ardea cinerea, S. Rhodesia, p. 487 figs., Beverley-Burton, M. (2).

Meggittina Lynsdale reduced to subgenus of Catenotaenia, p. 1332, Tenoru, F. (1).

Moniezia expansa (Rud.) in cattle, Honduras, p. 121 fig., Kreis, H. A. (1).

Monoecocestus parcitesticulatus sp. nov. in int. of Cavia porcellus (type-host) and C. aperea, Brazil, p. 67, Arandas Rego, A.

Myotolepis [Hymenolepis] grisea (v. Ben.) n. comb. in Myotis myotis, Czechoslovakia, p. 343 figs., Tenora, F. & Baruš, V.

Nasutaenia gen. nov., Dilepididae, defined, p. 19, type: N. [Dilepis] nasuta (Fuhrm.) n. comb. in Theristicus melanopis, Brasil, p. 20, Baer, J. G. & Bona, F.

Nematotaenia hylae sp. nov. in duodenum of Hyla ewingii (type-host) and Crinia signifera, Tasmania, p. 2 figs., **Hickman**, J. L.

Neodioecocestus gen. nov., Dioecocestidae, defined p. 383, type: N. cablei sp. nov. in Podiceps ruficollis, India, p. 381 figs., Siddiqi, A. H. (2).

Neogryporhynchus gen. nov., Dilepidinae, defined p. 7, type: N. [Taenia] cheilancristrotus (Wedl) in Botaurus, Ardea, Nycticorax spp., pp. 7, 42 figs., lasiopeius sp. nov. in Ardea p. purpurea, France, pp. 8, 24, 42 figs., Baer, J. G. & Bona, F.

di

m

P

A

(2 F

to

te

tr S b

Occhoristica osheroffi Meggitt in Ctenosaura pectinata, p. 357 figs., amphisbeteta Meggitt in Calocitta formosa azurea, p. 362 figs., Mexico, Flores-Barroeta, L. & Hidalgo-Escalante, E.

Ophiotaenia ophiodex sp. nov. in Causus rhombeatus, S. Rhodesia, p. 275 figs., Mettrick, D. F. (3).

Panuwa caballeroi in Chettusia leucura, p. 407 figs., vogeae in C. leucura, p. 410 figs., spp. nov., India, Singh, K. P. & Singh, K. S.

Parabothrium gadipollachii (Rud.) in Gadus pollachius and G. callarias, N.E. Atlantic, p. 304 figs., Williams, H. H. (2).

Paradilepis Hsü redefined, p. 16, patriciae sp. nov. in Platibis flavipes, Australia, pp. 17, 48-52 figs., [Tamia] transfiga (Kr.) n. comb. in Ajaja ajaja, pp. 17, 52 fig., Baer, J. G. & Bons, F.

Paruterina zambiensis in Campephaga phoenica, p. 181 figs., pentamyzos in Prinops plumata paliocephala, p. 183 figs., spp. nov., S. Rhodesia, Mettrick, D. F. (2).

Parvitaenia Burt redefined, p. 1, list of spp., p. 2, macrophallica in Cochlearius c. cochlearius, Brazil, pp. 2, 28, 30 figs., microphallica in C. c. c., Brazil, pp. 2, 28, 30 figs., microphallica in C. c. c., Brazil, pp. 2, 28, 30 figs., clavipera in Ardea novaehollandiae, Australia, pp. 3, 32 figs., pseudocyclorchida, Australia, pp. 3, 44 [named paracyclorchida], fig., spp. nov., ardeolas Burt in Ardeola speciosa, Java, pp. 2, 26, 42 figs., [Taenia] macropees (Wedl) n. comb. in Nycticorax n. nycticorax, pp. 2, 42 fig., [Bancroftiella] ardeas (Johnst.) n. comb. in (?) Ardea novaehollandiae, Australia, p. 3, 42 fig., [Anomotaenia] glandularis (Fuhrm.) n. comb. in Egretta intermedia plumifera, Australia, p. 3, 44 figs., [Taenia] aurita (Rud.) n. comb. in Hydranassa coerula, pp. 3, 34, 44 figs., Baer, J. G. & Bona, F.

Penetrocephalus gen. nov., Bothriocephalidae, type: P. ganapatii sp. nov. in Saurida tumbil, India, p. 155 figs., Rao, K. H.

Phyllobothrium biacetabulatum sp. nov. in spiral valve of Rhinobatus schlegeli, Japan, p. 41 figs., Yamaguti, S. (2).

Polypocephalus vesicularis sp. nov. in spiral valve of Rhinobatus schlegeli, Japan, p. 46 figs., Yamaguti, S. (2).

Proorchida Fuhrm. redefined, p. 13, Baer, J. G. & Bona, F.

Proteocephalidae, key to subfamilies, p. 53, Khalil, L. F. (1).

Proteocephalus sandoni sp. nov. in int. of Heterotis niloticus, Sudan, p. 43 figs., Lynsdale, J. A.—P. sandoni Lynsdale transf. to Sandonella, p. 47, Khalil, L. F.—P. percae (Müll.) larva in Eudiaptomus graciloides, p. 50 figs., macrocephalus (Crepl.) larva in Cyclops insignis, p. 54 fig., Poland, Jarecka, L. (1).

Pseudodiorchis [Urocystis] prolifer (Villot) n. comb. (syn. P. multispinosa Zarnowski) cysticercoid in Glomeris connexa, adult in Sorea a. araneus, Poland, p. 197 figs., Kisielewska, K. (1).

Raillietina (R.) tetragona (Molin) in fowl, Honduras, p. 125 figs., (R.) echinobothrida (Mégnin) in fowl, Honduras, p. 126 figs., Kreis, H. A. (I).—R. (R.) werneri (Klaptocz) redescr. from Uroccius indicus, S. Rhodesia, p. 47 figs., Mettrick, D. F. (6).—R. (R.) tobyoensis sp. nov. in Columba livia domestica, p. 57 figs., Japan, Sawada, I. (1).—R. (R).) dattai sp. nov. in Gallus gallus dom., India, p. 485 figs., Sinha, P. K. (1).—R. (Fuhrmannetta) caballeroi sp. nov. in Oropeleia caniceps, p. 377 figs.,

(Par.) numida (Fuhrm.) in Numida galeata, p. 379 figa., (Par.) maginumida Jones in N. galeata, p. 381 figs., (Fuhrmannetta) crassula (Rud.) in Streptopelia turtur, p. 383 figs., (P.) filiforme sp. nov. in S. turtur, p. 383 figs., Cuba, Vigueras, I. P.

Sandonella gen. nov., Proteocephalidae, defined p. 52, type: S. [Proteocephalus] sandoni (Lynsdale) n. comb. from Heterotis niloticus, Sudan, pp. 47, 52 figs., Khalii, L. F. (1).

Sandonellinae subfam. nov., Proteocephalidae, for Sandonella Khalil, p. 52, Khalil, L. F. (1).

Schistocephalus Crepl. reviewed, pungitii in Pungitius pungitius, p. 1511 figs., nemachili in Nemachilus crassus, p. 1514 figs., spp. nov., Russia, Dubinina, M. N.— S. thomasi sp. nov. in Larus argentatus and Sterna hirundo, Michigan, p. 200 figs., Garolan, G. S.

Schistotaenia macrorhyncha (Rud.) in Colymbus d. dominicus, Cuba, p. 389 figs., Vigueras, I. P.

Schizorchis caballeroi sp. nov. in Ochotona collaris, Alaska, p. 399 figs., Rausch, R. (2).

(Spasskijela) subgen. nov., Catenotaenia, to incl. lobata Baer, kratochvili sp. nov. and capensis Ortlepp, pp. 1331-1332, Tenora, F. (1).

Taenia crassiceps Rud. (Cysticercus longicollis Rud., C. multiformis Hölldobler) proliferating larva to tumour in cervical region of Femneus zerda, France, p. 15 figs., Callot, J. & Gayot, G.

Tatria decacantha Fuhrm. cysticercoids in larvae of Agrion sp., Russia, p. 287 fig., Golikova, M. N.— T. acanthorhyncha (Wedl) larva in Macrocyclops albidus, Poland, p. 62 figs., Jarrecka, L. (1).

Tetrathyridium sp. in Nothura maculosa agassizi, Peru, p. 392 fig., Dollfus, R. P. (1).

Valipora Linton (syn. Ophiovalipora Hsü) redefined, p. 8, list of spp., p. 8, parvitamiunca in Egretta sacra, Australia, pp. 9, 38, 46 figs., pachipora in Egretta intermedia, Java, pp. 9, 36 fig., glomovaginata in Ardea p. purpurea, France, pp. 9, 34, 46 figs., spp. nov., [Taenia] campylancristrota (Wedl) n. comb. in Ardea c. cinerea, Italy, pp. 8, 36, 46 figs., Dileps's ardeolae (Singh) n. comb. in Ardeolae, Egretta, Gorsachius spp., p. 9 [Lateriporus] spinosus (Fuhrm.) n. comb. in Cochlearius c. cochlearius, p. 9, [Ophiovalipera] minuta (Coil) n. comb. in Butorides v. virescens, p. 9, Baer, J. G. & Bona, F.

Vampirolepis balsaci (J. & B.) in Eptesicus serotinus, Myotis bechsteini, p. 345 figs., rysazyi sp. nov. in int. of E. serotinus, p. 347 figs., Czechoslovakia, Tenora, F. & Baruš, V.

Vogea vestibularis Johri a syn. of Cyclorchida omalancristata (Wedl), p. 16, Baer, J. G. & Bona, F.

#### NEMERTINEA

Heteronemertinea, classification, p. 48, Friedrich, H. Micrura Ehrbg., reviewed, p. 48, Friedrich, H.

Obnemertes gen. nov., Pelagonemertidae, defined p. 838, type: O. maximovi sp. nov., Antarctic, p. 839 figs., Korotkevitsch, V. S.

# NEMATHELMINTHES

# SUBJECT INDEX

## GENERAL

Addresses: Reviews.—Plant-nematology in Sweden, Ahlberg, O.; Helminthology of the Ignalina district of Lithuania, Babenskas, M.; Helminths of medical and veterinary importance, Eichler, W.; Parasitological speculations and patterns, Foster, A. O.; Phytonematology in Germany, Goffart, H. (2); Study of plant-parasitic nematodes, Jones, F. G. W.; Physiological-ecological method in nematode research, Kampfe, L. (1); Nematodes for teaching purposes, Peterson, J. E.; Parasitological expedition in Albania, Rosický, B.; Discovery of trichinae, Schwartz, B.; Goal for parasitologists, Stauber, L. A.; Relation of parasitology to hydrobiological and zoogeographical problems of the South Atlantic, Szidat, L.

History.—Historical resumé of the Helminthological Society of Washington, Gardiner, J. L. et al.

Taxonomy.—Revision of the genus Diplotriasna, Anderson, R. C. (1); Validity of the generic name Greeneema, Andrássy, I. (8); Systematic position of Gelanocaulus boievi, Boev, S. N. (1); Constitution of the genus Cephalobus, Brzeski, M. (1); Systematic position of the Wuchereria malayi complex, Buckley, J. J. C.; Classification of the Trichostrongyloidea, Chabaud, A. C. Systematic of the superfamily Scuratoidea. A. G.; Systematics of the superfamily Seuratoidea, Chabaud, A. G. et al.; Systematics of the family Atractidae, Chabaud, A. G. & Petter, A. J.; Review of the genus Cobbonchus, Clark, W. C. (5); Review of the of the genus concentus, carra, v. c. (s); Review of the genus Polyacambenhynchus, Diaz-Ungria, C. & Rodrigo, A. G.; Systematic notes on the genera Oxysomatism and Aplectone, Fotedar, D. N.; Taxonomic note on the genus Cyrlosomum, Gambino, J. J. & Heyneman, D.; Taxonomic importance of the anal region in D.; taxonomic importance of the anal region in Heterodera, Goffart, H. (1); Classification of the Palaeacanthocephala, Golvan, Y. J. (1), (2), (3); Systematic note on the family Cobboldinidae, Gon-Systematic note on the family Cobboldinidae, Gon-calves da Costa, S. C.; Classification of the super-family Aphelenchoidea, Goodey, J. B. (2); Identity of Rotylenchus robustus, Goodey, J. B. & Seinhorst, J. W.; Review of the genus Meloidodera, Hopper, B. E.; Nomenclatural status of Capillaria columbae of Graybill and Calodium tenue Duj., Hwang, J. C. & Wehr, E. E.; Systematic note on the genus Dubioxyuris, Inglis, W. G. (1); Systematic position of the subfamily Schneidernematinae, Inglis, W. G. & Chabaud, A. G. Revision of the genus Trybanoxyuris. Inglis. A. G.; Revision of the genus Trypanoxyuris, Inglis, W. G. & Diaz-Ungria, C.; Synonymy of Cystocaulus ocreatus, Kassai, T. (1); Systematic position of Sphaerularia bombi and S. ungulacauda, Khan, M. A. (2); Importance of the accessory piece in the differentiation of Syphacia spp., Kruidenier, F. J. (2); Systematic position of the genus Amplicaceum, Le Van-Hoa, (2); Nomenclatural note on Pratylenchus, Loof, P. A. A.; Review of Cucullanus spp. from pleuronectiform fishes, Margolis, L.; Systematic position of the genus Seuratinema, Mawson, P. M. (2); Status of the genus Seuratinema, Mawson, P. M. (2); Status of the genus Pseudophysaloptera, Morosov, G. F.; Systematic position of Dorylaimus meyli Paetzold, Paetzold, D.; Classification of Trichurid nematodes, Roman, E. (2); Family Chambersiellidae re-defined, Sanwal, K. C. (1); Status of Anguillula redivina, Sanwal, K. C. (1); Status of Anguillula rediviva, Sanwal, K. C. (2); Systematics of the genus Amplicacum, Sprent, J. F. A. & Mines, J. J.; Constitution of a new Subuluroid family, Teixeira de Freitas, J. F. (1); Review of the genus Rondonema, Travassos, L. & Kloss, G. R.; Taxonomy of Hydromemis contorta, Welch, H. E. (3); Systematics of the genus Camallanus, Yeh, L.-S. (3); Thominx böhmi differentiated from T. aerophilus, Zarnowski, E. & Patyk, W.

Technique: Methods.—Maintenance of Strongyloides ratti in laboratory conditions, Brener, Z. &
Chaia, G.; Selective staining of egg-shell of human
helminths, Brygoo, E. R. et al.; Modified Graham
swab for Enterobius vermicularis, Cheng, T. C. (3);
Cultivation of Hyostrongylus rubidus and Ossophagostomum
quadrispinulatum, Diamond, L. S. & Douvres, F. W.;
In vitro cultivation of nematodes of sheep and cattle,
Douvres, F. W. (1); Cultivation of Ossophagostomum
radiatum, Douvres, F. W. (2); Method for recovery of
nematodes from infected roots, Dropkin, V. H. et al.;
Dilution hatching trial for Heterodera rostochiensis,
Ellenby, C. & Gilbert, A. B. (2); Axenic culture of
Caenorhabditis elegans, Hansen, G. L., Yarwood, E. A.
et al.; Laboratory notes on plant-parasitic nematodes,
Hesling, J. J.; Diagnosis of Heterodera spp., Kampfe, L.
(3); Field-sampling and laboratory extraction of stemelworms, Kleijburg, P.; Method for demonstrating
filariids in vectors, Lebled, B.; Laboratory maintenance of Dirofilaria uniformis, Moon, A. P. et al.; Method
for maintenance of nematodes in agar, Ouden, H. den
(3); In vitro culture of Ascaris lumbricoides larvae, Pitts,
T. D.; Vital staining of microfilariae, Rothstein, N. &
Brown, M. L.; Axenic culture of Metastrongvius spp.,
Sen, H. G. & Kelley, G. W., Jr.; Technique for
diagnosis of Stephanurus in pigs, Tromba, F. G. &
Baisden, L. A.; Method for processing nematodes,
Warner, L. J. & Hague, N. G.; Culture of parasites,
Weinstein, P. P.; Method for rapid concentration
and mounting of nematodes, Zuckerman, B. M. (1).

Museums-collections.—Acanthocephala in collections of Zoological Museum, Hamburg, Sinzar, D. S.

Obituary.—†José Manoel Ruiz, Anon.; †D. O. Morgan, P[eters], B. G.

#### STRUCTURE

General.—Morphology of Cystocaulus ocreatus adults and larvae, Kassai, T. (4); Morphology of Heterodera cruciferae, Mackintosh, G. M.; Morphology of the Oxyuroidea, Osche, G.; Morphology of Ditylenchus destructor, Wu, L. Y. (1).

Larva.—Larvae of Xiphenema diversicaudatum, Goodey, J. B. et al.; Giant larvae of Heterodera trifolii, Mulvey, R. H. (1); Morphology of microfilariae, Taylor, A. E. R. (2).

Head.—Mouth-structure in the Mononchidae, Andrassy, I. (4); Head-structure of Subulurid nematodes, Inglis, W. G. (2); Cephalic morphology in Trypanoxyuris, Inglis, W. G. & Diaz-Ungria, C.

Cuticle.—Cuticular structure of the hinder region of Heterodera, Goffart, H. (1); Hemizonid in nematodes, Timm, R. W. (3).

Alimentary canal.—Oesophago-intestinal junction in Mononchidae, Clark, W. C. (1).

Reproductive system.—Structure of vulval cone in *Heterodera*, Goffart, H. (5); Structure of ovarian region in *Ascaris*, Prestage, J. J.

Histology: Cytology.—Histology of hypoderma in Ascarida, Bogojavlenskij, J. K.; Cytology of Heterodera rostochiensis, Cotten, J.; Electron microscopy of the

egg-shell of Trichuris vulpis and Capillaria hepatica, Inatomi, S.; Histology of nematode-galls, Le Berre, J. R. & Ritter, M.; Matrix glands in Meloidogyne, Maggenti, A. R. & Allen, M. W.; Anaphase movement of chromosomes in egg of Ascaris equorum, Makarov, P. V. (1); Reduced cell-division in Assaris equorum, Makarov, P. V. (2); Effects of ultraviolet and roentgen rays on mitosis in egg of Ascaris equorum, Neufahrt, A.; Cytology of Ascaris equorum, Serra, J. A. & Picciochi, P. G. C.; Plurivalent nature of germ-cell chromosomes of nematodes, Wessing, A

Variation: Anomaly.—Double vulva in Tobrilus sp., Andrassy, I. (8); Morphological anomalies in Haemonchus contortus, Becklund, W. W.; Abnormalities in second-stage larva of Heterodera trifolii, Mulvey, R. H. (2); Sex-dimorphism in the Oxyuroidea, Osche, G.

## PHYSIOLOGY

Constitution: Metabolism.—Parasite physiology, Bueding, E.; Acid phosphatase in Neocchinorhynch Acanthocephala, Bullock, W. L. (1); Nutrition in Camorhabditis elegans, Hansen, E. L., Yarwood, E. A. et al.; Amino acids in Ascaris eggs, Jaskoski, B. J.; Glycogen and fat in Thelastoma bulhoesi, Lee, D. L. (1); Gelatinous matrix in Meloidogyne, Maggenti, A. R. & Allen, M. W.; Electrophoresis of perivisceral fluid of Ascaridia galli, Monteoliva, M. & Guevara, D.; Incorporation of <sup>14</sup>C into amino acids of Camorhabditis briggsae, Nicholas, W. L. et al.; Acetylcholinesterase in plant-parasitic nematodes, Rohde, R. A. (1); Fluorescence of tetracyclines in Diridiaria. R. A. (1); Fluorescence of tetracyclines in *Dirofilaria*, Tobie, J. E. & Beye, H. K.

Vitality.—Longevity of Ditylenchus dipsaci in vitro, Bosher, J. E.; Survival of Hammerschmidtiella in moulting Blatta, Lee, D. L. (2); Survival of Heterakis on soil, Lund, E. E.; Growth and migration of Ascaris larvae in piglets, rats and mice, Olsen, L. S. & Kelley, G. W. Growth of Cooperia curticei in sheep, Sommerville, R. I.

Neurophysiology.—Galvanotaxis of Panagrellus redivious, Caveness, F. E. & Panzer, J. D.; Galvanotaxis of Strongyloides larva, Doby, J. M. & Bernard, C.

Environmental effects.-Effect of liming on nematodes in pine-humus, Bassus, W.; Effect of deficiencies on growth in Meloidogyne javanica, Bird, A. F. (1); Survival of nematodes in hibernating Marmota monax, Clute, R. M. (1); Influence of hibernation on Trichinella in dormouse, Chute, R. M. (2); Effect of body-temperature on development of Trichinella in bats, Clute, R. M. & Covalt, D. B.; Effects of croprotation on freeliving nematodes, Deubert, K. H. (2); Effect of pregnancy in mice on Aspiculuris, Dunn, M. C. & Brown, H. W.; Salinity tolerance of Panagrolaimus spp., Everard, C. O. R.; Effect of irradiation on reproduction in Strongulaide Aphillary. Kats. E. E. on reproduction in Strongyloides papillosus, Katz, F. F.; Effect of temperature on respiration in phytonematodes, Ladygina, N. M.; Effects of weaning on acquisition of nematodes by lambs, Levine, N. D. et al.; Sensitivity of nematodes to gamma and X-ray irradiation. Myers, R. F.; Effects of temperature on larvae of Porrocaecum decipiens, Ronald, K. (2); Effect of population-density on growth in *Hymenolepis diminuta*, **Roberts**, L. S.; Influence of CO<sub>2</sub> on respiration in plant-parasitic nematodes, **Rohde**, R. A. (2); Effect of immunity on growth in Litomosoides carinii, Scott, J. A.; Influence on certain crops on Meloidogyne hapla populations, s'Jacob, J. J.; Effects of hosts on popu-lations of Heterodera rostochiensis, Stelter, H. & Raeuber, A.; Influence of rotations on Heterodera göttingiana, Stemerding, S.; Effects of temperature on survival

of microfilariae, Taylor, A. E. R. (2); Effects of age and season on helminths in sheep, Ulyanov, S. D.; Effect of forage-height on larvae of cattle-nematodes, Vegors, H H.; Effect of temperature and humidity on Heterodera rostochiensis larvae, von Mechow Lewis, F. J. & Mai: W. F.; Environmental effects on migration of Heterodera rostochiensis, Wallace, H. R. (1); Effect of irradiation on Heterodera rostochiensis larvae, Weischer, B. (3).

# REPRODUCTION AND DEVELOPMENT

Reproduction.-In two strains of Camorhabditis elegans, Hansen, G. L., Yarwood, E. A. et al.

Spermatogenesis .- In Litomosoides and Dirofilaria, Taylor, A. E. R. (1).

Parthenogenesis .- In Heterodera rostochiensis, Ouden, H. den (2).

Embryology.—Of Litomosoides and Dirofilaria, Taylor, A. E. R. (1); Of Radopholus similis, Van Weerdt,

Development.—Development of Cosmocercoides dukas, Anderson, R. C. (5); Development of nematode eggs in soil, Biziulevičius, S. (2); Development in Heligmosomum and Strong yloides, Erhardova, B. (1); Development of Cystocaulus larvae in snails, Kassai, T. (3); Development of nematode eggs, Nigon, V. et al. 1; Development of nematode eggs, Nigon, V. et al.; Second ecdysis of parasitic nematodes, Rogers, W. P. & Sommerville, R. I.; Development of Porocascum ensicaudatum, Ryšavý, B. (1); Development of Litomosoides carinii, Scott, J. A.; Development of Dirofilaria immitis in mosquito, Taylor, A. E. R. (3); Development of pasture-stages of Nematodirus spp., Thomas, R. J. & Stevens, A. J.; Post-embryonic development of Radopholus similis, Van Weerdt, L. C.; Development of Impalaia tuberculata, Wetzel, R. & Footmeyer, H. P.

Life-history.—Of Folsyella furcata, Brygoo, E. R.; Of Parafilaria multipapillata, Gnedina, M. G. & Osipov, A. N.; Of Angiostrongylus vasorum, Guilhon, J.; A. N.; Of Angiostrongylus vasorum, Guilhon, J.; Of Dioctophyme renale, Karmanova, E. M. (1); Of Porrocaccum decipiens, Myers, B. J. (1); Of trichinae, Schwartz, B.; Of Rhabdochona denudata, Shtein, G. A.; Of Aphelenchoides ritzema-bosi in chrysanthermum, Wallace, H. R. (2); Of Rhabdias sphaerocephala, Williams, R. W.; Of Dilylenchus dipsaci on onion, Yuksel, H. S.; Life-history note on Gnathostoma procyonis, Ash, L. R.; Life-histories of helminths of fishes in Lusik-Kul Hannow, K. I. Life-histories fishes in Issik-Kul, Iksanov, K. I.; Life-history note on Dioctophyme renale, Karmanova, E. M. (2); Life-history note on Polymorphus minutus, Pflugfelder, O.

Bionomics of ova and larvae.-Polar body in eggcapsule of Cystidicola, Anderson, R. C. (3); Migration of Ascaris laevis in experimental hosts, Babero, B. B. (1); Egg-shell constitution in helminths, Capron, A. & Brygoo, E. R. (2); Effect of temperature on larval development of cattle-nematodes, Ciordia, H. & Bizzell, W. E.; Winter dormancy of Heterodera cysts, Cunningham, P. C.; Effect of phenothiazine on metabolism of infective nematode larvae, Dickson, W. M. & Dunlap, J. S.; Population-dynamics of Los larvae in Mandrillus, Duke, B. O. L. (1); Hatching factor of Heterodera rostochiensis, Ellenby, C. & Gilbert, A. B. (1); Spring-rise in strongyloid egg-counts of housed sheep, Field, A. C. et al.; Survival of emerged Heterodera schachtii larvae, Golden, A. M. & Shafer, T. A. A. and infectivities of Nithestandle. T.; Age and infectivity of Nippostrongylus larvae, Haley, A. J. & Clifford, C M.; Effects of various media on eggs and larvae of Ascaridia galli, Hwang,

ige ).; les,

ity

is, ra-

);

ae,

itis

it,

ggs igp-); P.

um ito-

ria

ent

) h-

in,

m, la,

n,

of

fe-

g-

ao, n,

on H.

era

on n,

ng

of ed

r,

ic,

J. C.; Entry of Chordodes into insect larvae, Inoue, I.; Effects of ultra-violet radiation on Nippostrongylus muris larvae, Keeling, J. E. D.; Parasitic phase in postembryonal development of Amidostomum anseris, Kobule's, T.; Behaviour of Toxocara canis larvae in mice, Lee, H.-F. (1); Variation in counts of Heterodera eggs in soil, Moriarty, F.; Migration of Ascaris lumbricoides larvae in mice, Münnich, A.; Periodicity of Splendidofilaria quiscali larvae, Odetoyinbo, J. A. & Ulmer, M. J.; Hatching of Heterodera rostochiensis in soil, Ouden, H. den (1); Bionomic note on Trichinella spiralis larvae, Phillipson, R. E. & Kershaw, W. E.; Effects of temperature on Ascaridia eggs, Reid, W. M. (1); Stimulus for hatching eggs and exsheathing larvae of parasitic nematodes, Rogers, W. P.; Effects of various root-diffusates on eggs of Heterodera rostochensis, Sembdner, G. & Schreiber, K.; Decay of eggs and larvae of Heterodera, Shepherd, A. M.; Hatching response of Meloidogme, Viglierchio, D. R. & Lownsbery, B. F.

# EVOL'ITION AND GENETICS

Host-parasite relations.—Speciation in the genus Cyrtosomum, Gambino, J. J. & Heyneman, D.; Ecology of host-parasite relationships, Noble, E. R.; Host-parasite relations of Oxyuroidea and the Diplopoda, Osche, G.

#### **ETHOLOGY**

Bionomics.—Ecology of nematodes of freshwater fishes, Bauer, O. N.; Nematodes in pine-humus, Bassus, W.; Attraction of phytonematodes to roots, Bird, A. F. (2); Ecology of free-living root-nematodes in Rhineland soils, Cichorius, H.-D.; Pratylenchus penetrans causing "soil-sickness", Decker, H. (2); Bionomics of soil-nematodes, Deubert, K. H. (1); Ecological notes on Leidynema appendiculata, Fay, C. M. & Etges, F. J.; Bionomics of Ascaridia in chickens, Grzywiński, L.; Nematodes in sand-layers of waterworks, Husmann, S.; Tardigrades attacking nematodes, Hutchinson, M. T. & Streu, H. T.; Pattern of root invasion by Heterodera schachtii, Kampfe, L. (2); Bionomics of Meloidogyne in India, Lall, B. S. & Ansari, M. N. A.; Effect of outfall water of power-station on freeliving nematodes, Markowski, S.; Biology of Lava migrans, Petter, C.; Population changes of Heterodera major, Stone, L. E. W.; Bionomics of Heterodera rostochiensis in Lithuania, Vinickas, Z. & Rimkute, M.; Behaviour of Aphelenchoids ritzema-bosi in chrysanthemum, Wallace, H. R. (2); Biology of Philometra sanguinea in Poland, Wierzbicki, K.

Immunobiology: Serology.—Susceptibility of hamsters and guinea-pigs to Strongyloides papillosus, Bezubik, B. (1); Resistance of nematode eggs against environmental conditions, Biziulevičius, S. (1); Resistance in white rat to Nematospiroides, Cross, J. H.; Resistance of potatoes to root-eelworm, Dunnett, J. M.; Susceptibility of Anopheles to Dirofilaria uniformis, Duxbury, R. E. et al.; Immunization of chickens, pigs and sheep against helminths, Ershov, V. S.; Immunobiological tolerance in trichinosis, Ewert, A. & Olson, L. J.; Cultivation of potato varieties resistant and susceptible to Heterodera rostochiensis, Goffart, H. (3); Age-resistance of cattle to nematodes, Herlich, H.; Susceptiblity of chrysanthenum to Aphelenchoides ritzema-bosi, Hesling, J. J. & Wallace, H. R.; Immune reactions in Niphostrongylus muris infections, Jackson, G. J.; Immunology of Dictyocaulus viviparus, Jarrett, W. F. H. et al.; Isolation

of antigens from Ascaris lumbricoides, Kent, H. N.; Resistance of white clover to Heterodera trifolis, Kuiper, K.; Resistance in rats to Trichinella following Nippostrongylus infection, Louch, C. D.; Immunization against cattle lungworm, Lucker, J. T. & Vegors, H. H.; Immunity in cattle to Cooperis and Oesophagostomum, Mayhew, R. L. et al.; Immunity to parasites, Oliver-Gonzalez, J. & Anderson, R. I.; Induced tolerance of white mice to Trichinella, Olsen, L. J. & Ewert, A.; Effect of Strongyloides ratio on resistance in rats, Roman, E. (1); Innate resistance in hamsters to Trichinella, Ritterson, A. L.; Immunization of guineapigs against Ascaris, Taffs, L. F.; Effect of nematodes on serum-proteins in lambs, Turner, J. H. & Wilson, G. I.; Antigens from Trichinella larvae, Van Peenen, P. F. D.; Irradiated Ascaris larvae associated with immunity in mice, Villella, J. B. et al.; Adaptability of Trichuris maris to various laboratory rodents, Worley, D. E. et al.

Epidemiology.—Incidence of Spirocerca and Dirofilaria in dogs in the Philippines, Bailey, W. S.; Epidemiology of filariasis in Fiji, Burnett, G. F.; Survey of Enterobius vermicularis among pre-school age children, Cheng, T. C. (3); Incidence of nematodes in Albanian children, Erhardova, B. et al.; Epizootiology of Capillaria hepatica in Peromyscus maniculatus, Freeman, R. S. & Wright, K. A.; Actiology of Protostronyvlid disease of goat and sheep Canadia. protostrongylid disease of goat and sheep, Gagarin, V. G. & Steshenko, V. M.; Distribution of microfilariae in East African and Indian Ocean region, flariae in East African and Indian Ocean region, Galliard, R.; Incidence of Cytasomum spp. in N. America, Gambino, J. J. & Heyneman, D.; Seasonal distribution of fish parasites in Rybinsk Reservoir, Isyumova, N. A. (2); Bancroftian filariasis in Tanganyika, Jordan, P.; Geographical distribution of Cytat T. (2) protostrongylid infestation in sheep, Kassai, T. (2); Onchocercosis in Portugese Guinea, Lecuona, M. de O. (1), (2); Human helminthiasis in Near and Middle East, Mumford, E. P.; Incidence of helminths among out-patients at Ezbet-El-Burg, Egypt, Nagaty, H. F. & Khalil, H. M.; Human filariasis in the Congo and Ruanda-Urundi, Oye, E. van & Pierquin, L.; Quantitative indices of helminths in fishes, Petrushevsky, G. K. & Petrushevskaya, M. G.; Filariasis in Lunda, Angola, Pires, F. M. et al.; Canine microfilariasis in eastern U.S.A., Rothstein, N. et al.; Aides asypti as experimental vector of Brugia malayi, Ramachandran, C. P. et al.; Transmission of Trichinella by rats and mice, Robinson, H. A. & Olsen, O. W.; Epidimiology of Dracunculus in N.-W. Ashanti, Scott, D.; Mosquito vectors of Dirofilaria immitis in Fiji, Symes, C. B.; Incidence of Enterobius infection among children in Bangkok, Vajrasthira, S. & Harinasuta, C.; Vectors of filariasis in Malaya, Wharton, R. H.; Chrysops as possible vectors of human loiasis, Williams, P.; Experimental transmission of ruminant nematodes to rabbit, Wood, I. B. & Hansen, M. F.; Epizootiology of trichiniasis in Iowa, Zimmermann, W. J. et al.

Pathology: Effects on hosts.—Pathogenicity of nematodes in Mephitis, Babero, B. B. (3); Pathology of nematodes in sheep, Bhatia, B. B.; Histopathology of Meloidogyne spp. in gardenia, Davis, R. A. & Jenkins, W. R.; Effect of Loa infection on spleen of Mandrillus, Duke, B. O. L. (2); Experiments on the disturbances of chemo-reception in experimental ascaridiosis, Edelstein, I. A.; Pathology of Ascaris lumbricoides larvae in lambs, Fitzgerald, P. R; Effects of gastrointestinal nematodes on calves, Goldberg, A. & Lucker, J. T.; Nematode associated with "red-ring"

F.

of

S n P L

disease of coconut, Goodey, J. B. (1); Nematodes attacking mushroom mycelium, Goodey, J. B. (3); Histopathology of experimental ascaridiosis in chickens, Kadziolka, A.; Combined effects of Haemonchus contortus and Nematodirus spathinger on lambs, Kates, K. C. & Turner, J. H.; Histopathology of Polymorphus magnus in intestine of ducks, Logachev, E. D. & Brushkin, B. R. (2); Capillaria causing cutaneous creeping eruption in man, Japan, Morishita, K. & Tani, T.; Histochemical changes produced by Ascaris lumbricoides larvae in white mice, Munnich, H.; Effect of Ditylenchus dipsaci on garlic, Nolte, H. W.; Effect of Pratylenchus penetrans on apple-seedlings, Pitcher, R. S. et al.; Histopathology of Echinorhynchus lageniformis in flounder, Prakash, A. & Adams, J. R.; Xiphinema index associated with fanleaf in grapevines, Raski, D. J. & Hewitt, W. B.; Pathogenicity of trichinae, Schwartz, B.; Dictyocaulus arnfieldi associated with bronchitis in an Egyptian donkey, Soliman, K. N.; Histology of skin in onchocerciasis, Soto, L. B.; Longidorus maximus causing injury to crop-plants, Sprau, F.; Ascaris lumbricoides associated with death in a chimpanzee, Stam, A. B.; Pathology of Nippostrongylus infestation in rats, Symons, L. E. A.

Economics: Control.—Treatment of Cooperia in Hawaiian calves, Alicata, J. E.; Activity of dithiazanine iodide against Ascaris in young pigs, Brody. G. & Wuest, E. C.; Smonchium obtusum feeding on Tylenchorhynchus, Chitwood, B. G. (1); Effects of serotonin in ascariasis, Costello, L. C.; Control of Pratylenchus penetrans, D'Herde, J. et al.; Control of Heterodera rostochiensis in Lithuania, Efremenko, V.; Efficacy of bephenium hydroxynaphthoate against gastro-intestinal helminths of cattle, Eisa, A. M. & Rubin, R.; Resistance of Haemonchus contortus to phenothiazine, Earse, F. D. et al.; Soil-treatment for eelworm control, Grainger, J.; Control of plant-parasitic nematodes, Hague, N. G. M.; Anthelmintic effects of bephenium hydroxynaphthoate on nematodes in man, Hahn, S. S. et al.; Effectiveness of management systems against nematodes in lambs, Kates, K. C. et al.; Turner, J. H. et al.; Enzie, F. D. et al.; Effect of phenothiazine on development of strongyle larvae, Kazlauskas, J.; Efficacy of bephenium embonate against Nematodirus spathiger, Marquardt, W. C. et al.; Control of Bancroftian filariasis in W. Africa, McGregor, I. A. & Giles, H. M.; Efficacy of piperazine adipate against nematodes, Nagaty, H. F. & Khalil, H. M. (I); Inhibition of Meloidogyne development by systemic compounds, Peacock, F. C.; Efficacy of dithiazanine against nematodes in children, Ricel, M. & Gagliano, E.; Effect of phenothiazine on Dictyocaulus filaria larvae in sheep, Sarwar, M. M. & Barya, M. A.; Effect of dithiazanine iodide on migrating Ascaris larvae in pigs, Shumaard, R. F. & Hendrix, J. C.; Sporozoan parasite of Meloidogyne in Mauritius, Williams, J. R.

# HOST-DISTRIBUTION

Plantae.—Praylenchus spp. as crop-pests, Decker, H. (1); New Meloidogyne sp. attacking Kikuyu grass in Kenya, De Grisse, A.; New Laimaphelenchus sp. from bark of American elm, Canada, Khan, M. A. (1); Host-plants of Ditylenchus dipsaci, Kradel, J.; Radopholus similis associated with black-head disease of bananas, Loos, C. A. & Loos, S. B.; New Meloidogyne sp. attacking coffee in Brazil, Lordello, L. G. E. & Zamith, A. P. L.; Host-plants of Ditylenchus dipsaci, Nolte, H. W.; Root-knot nematodes on sugar-cane, Rangaswami, G., Vasantharajan, V. N. & Ven-

kateson, R.; Morphological notes on Ditylenchus destructor from potato, iris and dahlia, N. America, Wu, L.-Y. (2); New Criconema sp. from African violets, Canada, Wu, L.-Y. (3); Parasitism of cranberry by Tetylenchus joctus, Zuckerman, B. M. (2).

Annelida.—Larval nematodes in Tubificid oligochaetes, Janiszewska, J.; Oligochaetes as interhosts of Dioctophyme renale, Karmanova, E. M. (1); Lumbriculus variegatus as interhost of Dioctophyme renale, Karmanova, E. M. (2); New Perodira sp. in Pheretima posthuma, East Pakistan, Timm, R. W. (5).

Mollusca.—Cosmocercoides dukae in terrestrial molluscs, Ontario, Anderson, R. C. (5); Daubaylia potomaca in snails, Michigan, Chernin, E. et al.; Arion as interhost of Angiostrongylus vasorum, Guilhon, J.; Terrestrial molluscs as interhosts of nematodes, Zdárská, Z.

Insecta.—Culex fatigans as interhost of Foleyella furcata, Brygoo, E. R.; Haematobia atripalpis as interhost of Pargilaria multipapillosa, Gnedina, M. G. & Osipov, A. N.; New Ektaphelenchus sp. in Douglas fir beetle, British Columbia, Khan, M. A. (1); Nematode parasites and associates of Ips confusus, Arizona and New Mexico, Massey, C. L. (1); New Cylindrocorpus sp. associated with Scolytus in elm, N. America, Massey, C. L. (2); Blatella germanica as probable interhost of Abbraviata caucasica, Petter, A. J.; Nematodes associating with Scotylids, Rühm, W.; New Panagrellus sp. in beetle-frass, British Columbia, Sanwal, K. C. (2); New Macrolaimus sp. from frass of bark-beetle, Quebec, Sanwal, K. C. (3); Mayfly-nymphs as interhosts of Rhabdochona denudata, Shtein, G. A.; Nematodes in Coleoptera from Richelieu, France, Theodorides, J.; †Parasitic nematode in a coleopteran from the Eocene, Germany, Voigt, E.; Neoaplectana melolontha in Melolontha larvae, Czechoslovakia, Weiser, J.; New Mermithid nematode in Aedes communis, Canada, Welch, H. E. (1); Mermithid nematodes in N. American mosquitoes, Welch, H. E. (2).

Crustacea.—Armadillidium vulgare as interhost of Prosthorhynchus cylindraceus, France, Dollfus, R. P. & Dalens, H.; Gammarus roseli as interhost of Polymorphus minutus, Hungary, Lukacsovics, F.; Helminths in benthic crustaceans of Barents Sea, Ouspenskaia, A. V.

Arachnida.—Nematodes from African and S. American Diplopods, Osche, G.; Nematodes in Myriapoda from Richelieu, France, Theodorides, J.; New Rondonema sp. in Neptunobolus, Brazil, Travassos, L. & Kloss, G. R.

Fishes.—Nematodes of fish in Kuslanaisk Province, Agapova, A. I.; Helminths of fish in Kazakhstan, Agapova, A. I. & Maksimova, A. P.; Two new Camallanus spp. in Indian fishes, Ali, S. M. (1); Acanthocephala from fishes, Florida, Bullock, W. L. (2); New Echinorhynchus sp. in Melanoglaea ventralis, Senegal, Dollfus, R. P. (11); Skrjabillanus tincae redescribed from Tinca tinca, Czechoslovakia, Ergens, R. (1); Helminths from fishes, Albania, Ergens, R. (2); Nematodes and Acanthocephala in salmonoids in North Pacific, Fukui, T.; Helminths of fish acclimatised in Balkhash-Iliisk basin, Gvozdev, E. V. & Agapova, A. I.; Helminths from catfishes, Kansas, Harms, C. E.; Pallisentis basiri encysted in liver of Trichogaster chuna, India, Hasan, R. & Qasirn, S. Z.; Helminths of fishes in Rybinsk Reservoir, Isjumova, N. A. (2); New Dracunculid nematode from Sudanese fish, Khalil, L. F. (2); Helminths of economic fishes of Kazakhstan, Kolesnikova, M. N.; New Caullanus sp. in Cyprinids, Russia, Krotas, R. (2); Helminths

ca, ts, by

-0

sts ri-

na

in

al

o.

n

from fishes, Kurašvili, B.; New Quadrigyrid acanthocephalans in fishes, Brazil and Paraguay, Machado, F., D. A. (1); New Neocchinorhynchus sp. in Paraguayan fish, Machado F., D. A. (2); Philonema spp. in Salmonids, Meyer, M. C.; Helminths of cyprinids in Kura river, Russia, Mikailov, T. K.; Spirocamallanus pereirai redescribed from Gillichthys mirabilis, California, Noble, E. R. & King, R. E.; Helminths from cyprinids in breeding ponds, Poland, Radwan, S.; Helminths of fishes, Kazakhstan, Sidorov, E. G. (1); Acanthocephala from fishes of the Upper Enisey, Russia, Spassky, A. A. & Roitman, V. A.; Helminths of marine fishes from East Kamchatka, Strelkow, J. A.; Philometrid nematodes from fishes, Brazil, Travassos, L.; Philometra sanguinea in crucian carp. Poland, Wierzbicki, K.; Helminths from marine fishes off British Isles, Williams, H. H. (4); Four new acanthocephalans from fishes, Japan, Yamaguti, S. (1); Camallanids from fishes, Ceylon, Yeh, L.-S. (2); Helminths from fishes in Sea of Japan and southern Kurile waters, Zhukov, E. V. (2).

Amphibia.—Nematodes from Amphibia, Frandsen, J. C. & Grundmann, A. W. (2); Nematodes from Amphibia in E. Pakistan, Gupta, S. P. (1); Nematodes from frogs in E. Pakistan, Gupta, S. P. (3); Nematodes from Amphibia, China, Hsü, W.-n.; Nematodes from Amphibia, Poland, Kozlowska, J.; Nematodes from Amphibia, California, Lehmann, D. I.; Helminths from Amphibia, Albania, Prokopič, J. (2); New Thelandros sp. in N. American salamanders, Schad, G. A.; Rhabdias sphaerocephala in Bufo marinus, Bermuda, Williams, R. W.; New Camallanus sp. in Xenopus, Tanganyika, Yeh, L.-S. (1).

Reptilia.—Nematodes from reptiles in Costa Rica, Brenes, R.-R. & Bravo-Hollis, M.; New Thelaziid nematode in a lizard, Bahamas, Chitwood, M. B.; New Polyacanthorhynchus sp. in Caiman, Venezuela, Diaz-Ungria, C. & Rodrigo, A. G.; New Neocchino-thynchus sp. from N. American turtles, Fisher, F. M.; Nematodes from the grecian tortoise, Forstner, M. J.; New Camallanus sp. in Lissenys, India, Gupta, N. K. & Singh, S.; Tanqua anomala in Elaphe rufodorsata, China, Hsü, W.-n.; Nematodes in smooth green snake, Ontario, Judd, W. W.; New Amplicaecum sp. in carpet-snake, Queensland, Sprent, J. F. A. & Mines, J. J.; New Parapharyngodom sp. in Diploglossus, Brazil, Teixeira de Freitas, J. F. & Dobbin, J. E. (2).

Aves.—Nine new Oxyspirura spp. in Indian birds, Ali, S. M. (2); New Splendidgilaria sp. in white-cheeked bulbul, Kashmir, Amir, S. & Ali, S. M.; Type-host of Ornithofilaria fallisensis, Anderson, R. C. (4); New Eufilaria sp. in a Java sparrow, Anderson, R. C. & Bennett, G. F.; Helminths of chickens in Alma-Ata Province, Belokobilenko, V. T.; Helminths from Lyrurus tetrix and Tetrao urogallus, Poland, Bezubils, B. (2); Nematodes from domestic fowls, Slovakia, Birová-Volosinovičová, V. (1); Nematodes in Meleagris in Slovakia, Birova-Volosinovičová, V. (2); Acanthocephala from birds, Peru, Dollfus, R. P. (1); Experimental infection of Mandrillus leucophaeus with Loa, Duke, B. O. L. (1); Helminths of Passeriformes in the Volga Delta, Dubinina, M. N. & Kulakova, A. P.; Nematodes from birds in E. Pakistan, Gupta, S. P. (2); New Capillaria sp. in Copyschus, E. Pakistan, Gupta, S. P. (2); New Capillaria sp. in Copyschus, E. Pakistan, Gupta, S. P. (4); Nematodes from birds, China, Hsü, W.-n.; Capillaria obsignata in peacock, U.S.A., Hwang, J. C. & Wehr, E. E.; Nematodes from Rumanian birds, Jordacheschu, D.; Cabillaria resetu and C. corvorum redescribed from

Corvids, France, Le Van Hoa (1); Helminths in Garulus glandarius and Pica pica from Lublin Palatinate, Poland, Luft, K.; Nematodes from British birds, Mettrick, D. F. (4); Helminths of birds in Hertfordshire, Mettrick, D. M. (5); Nematodes of birds in Zaïsansk depression, Russia, Panin, V. Y.; New filariid nematode in brain of osprey, Russia, Parukhin, A. M. & Oshmarin, P. G.; Helminths from Albanian birds, Ryšavý, B. (2); Note on Acuaria brevispicula, Sarwar, M. M. (2); New Ornithofilaria sp. in galliforms in Tuva Territory, Russia, Spasski, A. A. & Sonin, M. J.; Nematodes from chickens of Bahia, Brazil, Teixeira de Freitas, J. F. & Jorge da Silva, A. A.; New Capillaria sp. in Aratinga, Brazil, Teixeira de Freitas, J. F. & Machado de Mendonça, J. (2); Acanthocephala from shore-birds in Egypt, Ward, H. L.; Helminths of Geothlypis trichas, N. America, Wells, M. J. & Hunter, W. S.; Ascaridia galli in chicken's egg, Zinn, D. J.

Marsupialia.—Helminths from Didelphis virginiana, Georgia, Babero, B. B. (2); Two new Trichostrongyle nematodes in Australian pouched mouse, Queensland, Mawson, P. M. (1).

Edentata.—Trichostrongyle in pangolin, Formosa, Cameron, T. W. M. & Myers, B. J.; Brugia spp. in Manis javanica, Malaya, Laing, A. B. G. et al.; New Graphidiine nematode in Myrmecophaga tridactyla, Brazil, Teixeira de Freitas, J. F. & Machado de Mendonça, J. (3).

Cetacea.—Pharurus oserkaiae in Delphinapterus leucas, Alaska, Babero, B. B. & Thomas, L. J.

Ungulata.—Nematodes of Rupicapra rupicapra caucasica in Azerbaidjan, Asadov, S. M.; Nematodes of Indian sheep, Bhatia, B. B.; Helminths from domestic animals, Albania, Erhardova, B. et al.; Nematodes of wild ruminants in Kirgizia, Gagarin, V. G.; Nematodes in Antilocapra americana, New Mexico, Gilmore, R. G. & Allen, R. W.; Helminths from Cerous elaphus in Tatra National Park, Guoth, S. (1); Nematodes from ibex in Tatra National Park, Guoth, S. (2); Artionema labiato-papillosa [Setaria cervi] redescribed from hump-backed cattle, E. Pakistan, Gupta, S. P. (5); New Atractid nematode from a hyrax, Basel Zoo, Kreis, H. A. (2); New Ostertagia sp. in sheep, China, Ling, M. T. & Chow, S. C.; New Elaphostrongylus sp. in reindeer, Kola peninsula, Mitzkevich, V. Y.; Helminths from alimentary canal of cattle, W. Poland, Patyk, S.; Artionema bidentata in Mazama americana, Pazzil, Rego, A. A.; New Buckleyaris sp. in giraffe, London Zoo, Sarwar, M. M. (1); Experimental infection of sheep with Toxocara canis, Schaeffler, W. F.; New Syphacia sp. in domestic pig, India, Sinha, P. K. (2); Morphology of Dictyocaulus amfieldi from an Egyptian donkey, Soliman, K. N.; Lung nematodes of sheep in China, Syai Sho-Tai & Boev, S. N.; Impalaia tuberculata in Lithocramius walleri and Capra hircus, Wetzel, R. & Fortmeyer, H. P.; Helminths of pigs in Kazakhstan, Zakhryalov, Y. N.

Rodentia.—Filaria martis in Pedetes caffer, Africa, Anderson, R. C. (2); Nematodes in Oryctolagus cuniculus on Subantarctic Islands, Bull, P. C.; Nematopiroides dubius in Meriones unguiculatus, Crooss, J. H. & Scott, J. H.; Nematodes of Myopotamus coypus in Belorussian fur-farm, Dilko, N. I. & Merkusheva, I. V.; Nematodes from rodents in Albania, Erhardova, B. (2); Helminths of deer-mouse, Utah, Grundmann, A. W. & Frandsen, J. C. (1); New Capillaria sp. from kangaroo-rat, Utah. Grundmann, A. W. & Frandsen, J. C. (2); Helminths of musk-rats in Kazakhstan,

Gvozdev, E. V. (2); Brugia pahangi in Ratufa spp., Malaya, Laing, A. B. G. et al.; Helminths of rodents in Belorussia, Poland, Merkusheva, I. V.; Nematodes from Rattus rattus, Formosa, Myers, B. J. & Kuntz, R. E.; New Capillaria sp. in Eutamias, Russia, Romanov, I. V.; Nematodes in Arvicola terrestris, Azerbaidjan, Sadikhov, I. A.; New Ganguleterakis in Apodemus, Czechoslovakia, Tenora, F. (2); Nematodes of Microtinae in Kirgizia, Tokobaev, M. M.

Carnivora.—Filaria martis in Martes foina, Italy, Anderson, R. C. (2); Helminths from Mephitis mephitis, Louisiana, Babero, B. B. (3); Nematodes and Pseudoporrorchis hydromuris in cats, Sydney, N.S.W., Bearup, A. J.; Trichuris campanula in domestic cat, Bahamas, Clarkson, M. J. & Owen, L. N.; Brugia spp. in Malayan carnivores, Laing, A. B. G. et al.; Dracunculus insignis in Procyon lotor, Florida, Layne, J. N. et al.; Corynosoma hadweni in farm-mink, Britain, McTaggart, H. S.; Helminths of dogs in Ankara, Mirmioglu, M. et al.; Physaloptera rara in Nasua narica, Arizona, Neal, B. J.; Trichinella in carnivores in Colorado, Olsen, O. W.; Helminths from dogs and cats in Albania, Prokopič, J. (1); New Capillariid nematode in Procyon cancrivorus, Brazil, Teixeira de Freitas, J. F. & Machado de Mendonça, J. (1).

Pinnipedia.—Contracaecum ogmorhini from Arctocephalus sp., Amsterdam I., Campana-Rouget, Y. & Paulian, P.; Morphology of Porrocaecum decipiens from seals on eastern coasts of Canada, Myers, B. J.

Insectivora.—Castronodus strassenii redescribed from Crocidura caerula, E. Pakistan, Gupta, S. P. (2); Brugia pahangi in Echinosorex gymnurus, Malaya, Laing, A. B. G. et al.; Capillaria exigua and C. myoxi-nitelae redescribed, France, Le Van Hoa (1); Pseudophysaloptera soricina redescr. from Sorex araneus and Neomys fodiens, Russia, Morozov, G. F.

Chiroptera.—New Pterothomius sp. in Brazilian bat, Teixeira de Freitas, J. F. & Machado de Mendonça, J. (4); New Parallintoshius sp. in a bat, Brazil, Teixeira de Freitas, J. F. & Machado de Mendonça, J. (5).

Primates.—Nematodes from Macacus conomolgus, Indonesia, Bezubik, B. & Furmaga, S.; New Neochordodes sp. from man, Colombia, Faust, E. C. & Ramos, D. B.; Wuchereria vauceli in man, Madagascar, Galliard, R.; Helminths in monkeys, Graham, G. L.; Brugia spp. in Malayan monkeys, Laing, A. B. G. et al.; Nematodes from Macacus spp., India, Ryšavý, B. & Dudek, J.; New Filarioid nematode from the long-tailed macaque, Malaya, Yeh, L.-S. (4).

## GEOGRAPHICAL DISTRIBUTION

Europe.—New Rhabditis sp. from Switzerland, Alther, E. (2); New Deladenus sp. from Hungary, Andrássy, I. (2); New Thomia sp. from Hungary, Andrássy, I. (3); New Dorylaimus sp. from Hungary, Andrássy, I. (5); Nematodes in psammon of R. Adige at Verona, Andrassy, J. (6); Nematodes associating with Lithophyllum at Roscoff, Bénard, F.; New Cephalobus sp. in peat-moss, Poland, Brzeski, A. (1); Three new freeliving nematodes from Poland, Brzeski, M. (2); Redescriptions of three Mononchid nematodes from Britain, Clark, W. C. (2); Nematodes from Skipper's Island, Essex, Coles, J. W.; Nematodes among algae on Mediterranean coasts of Spain, Gadea, E. (1); Comparison of nematodes in algae of Atlantic and Mediterranean coasts of Spain, Gadea, E. (2); New marine nematodes from the supra-littoral of the

German coasts, Gerlach, S. A.; Freshwater nematodes from caves in French Jura, Juget, J.; Hemi cycliophora typica in fresh water, Estonia, Krall, E.; Acanthocephalus lucii in bottom fauna of Rybinsk Reservoir, Luferov, V. P.; Nematodes from brackish waters near Braunschweig, Germany, Meyl, A. H. (1); Free-living nematodes from inland saline habitats between Braunschweig and Magdeburg, Meyl, A. H. (2); New Tobrilus sp., Poland, Pieczynska, E.; Nematodes from Turkish vertebrates, Schad, G. A. et al.; Plant-parasitic nematodes in vineyard soils, Germany, Weischer, B. (1); Soil-nematodes in winegrowing areas of Germany, Weischer, B. (2); Hydromermis contorta in fauna of Britain, Welch, H. E. (3); Free-living nematodes from the Adriatic, Wieser, W.

Asia.—Free-living nematodes from Afghanistan, Andrássy, I. (9); Free-living nematodes from China, Andrássy, I. (11); Soil-nematodes from Madras City, Kannan, S.; Helminths of vertebrates on Sakhalin Is., Krotov, A. I.; Two new Trichodorus spp. from India, Siddiqi, M. R. (1); New Tylenchid nematode from northern India, Siddiqi, M. R. (2); New Leptasomatum sp. from the Arabian Sea, Timm, R. W. (1); Two new soil-nematodes from East Pakistan, Timm, R. W. (2); New Aphelenchoidid nematode from Pakistan, Timm, R. W. (4); Nematodes from Malayan mammals, Myers, B. J. (2).

Africa.—Limnicolous nematodes from the French Cameroons, Altherr, E. (1); Freshwater nematodes from French West Africa, Andrássy, I. (1); Two free-living nematodes from the Congo, Andrássy, I. (7); New Panagrobelus sp. from Kenya, Andrássy, I. (10); New Dolichodorus sp. from Togo, Luc, M. (1); Three new Robylenchoides spp. from the Ivory Coast, Luc, M. (2); Nematodes from vertebrates in the Sudan, Myers, B.-J. et al.

N. America.—Choanolaimus psammophilus and Synon-chium obtusum redescribed from U.S.A., Chitwood, B. G. (1); Free-living marine nematodes from N. California, Chitwood, B. G. (2); Three new Hemicriconemoides spp. from Florida, Esser, R. P.; New Paratylenchus sp. from Maryland, Jenkins, W. R.

S. America.—New Neochordodes sp. in Colombia, Faust, E. C. & Ramos, D. B.; Nematodes and Acanthocephala from domestic animals in S. America, Kreis, H. A. (1).

New Zealand.—Mononchid nematodes from New Zealand, Clark, W. C. (3); Four new lotonchus spp. from New Zealand, Clark, W. C. (4); Cobbonchus spp. from New Zealand, Clark, W. C. (5).

Antarctica.—New free-living nematodes from Graham Land, Allgén, C. A.

## SYSTEMATIC INDEX

## NEMATHELMINTHES

## NEMATODA

Acanthostephanocephalus gen. nov., Atractidae, defined p. 481, type A. caballeroi sp. nov. in int. of Procavia capensis, Basel Zoo, p. 481 figs., Kreis, H. A. (2).

Actinolaimus mpoumensis, p. 779 fig., birketi, p. 781 fig., spp. nov., papillatus W. Schn., p. 784 fig., Cameroons, Altherr, E. (1).

]

na-

emi

E. ;

er-

ish

l); ats H.

et

ils,

ne-

bro-

);

ın,

ıa,

ty,

s., ia,

m

*4778* 

w

ls,

ch

es

e-

1.

n,

Agamomermis culicis Stiles redescr. from mosquitoes, p. 204 figs., Welch, H. E. (2).

Alaeuris forcipiformis sp. nov. in Testudo, p. 19 figs., Forstner, M. J.

Amplicaecum Baylis a syn. of Orneoascaris Skrjabin, p. 760, Le Van-Hoa (2).—A. Baylis, systematics, p. 192, robertsi sp. nov. in Morelia argus variegatus, Queensland, p. 183 figs., Sprent, J. F. A. & Mines, J. J.

Ancylostoma caninum (Ercolani) in dog, Honduras, p. 59 figs., Kreis, H. A. (1).

Angiostrong ylus tateronae (Baylis) in Apodermus mystacinus, Albania, p. 92 fig., Erhardova, B. (2).

Anoplostoma von Bütschli, key to spp., p. 357, viviparum (Bastian) redescr., California, p. 358 figs., Chitwood, B. G. (2).—A. dubium sp. nov., Graham Land, p. 482 fig., Aligen, C. A.

Anticoma filicauda sp. nov., Graham Land, p. 477 fig., Allgén, C. A.

Aphelenchoidea Fuchs, classification, p. 111, Goodey, J. B. (2).

Aphelenchoides gallagheri sp. nov. in galleries of Ips confusus and I. ponderosae, New Mexico, p. 20 figs., Massey, C. L. (1).—A. (Bursaphelenchus) sexdentati sp. nov. associating with Ips sexdentatus, Germany, p. 205 figs., Rührn, W.

Aphelenchulus elongatus sp. nov. in body-cavity of lps confusus, New Mexico, p. 14 figs., Massey, C. L. (1).

Aphelenchus cocophilus Cobb transf. to Rhadinaphelenchus, p. 99, Goodey, J. B. (1).

Aplectana Raill. & Henry a syn. of Oxysomatium, p. 145, Fotedar, D. N.—A. agubernaculum in sm. int. of Rana tigrina, p. 321 figs., asiatica in sm. int. of R. t. and Bufo melanosticius, pl 323 figs., spp. nov., E. Pakistan, Gupta, S. P. (1).

Araeolaimus supralitoralis sp. nov., Adriatic, p. 85 figs., Wieser, W.

Artionema [Filaria] bidentata (Molin) n. comb. in abdominal cavity of Mazama americana, Brazil, p. 149 figs, Rego, A. A.

Ascaridia lineata (Schneider) in fowls, Honduras, p. 104 figs., Kreis, H. A. (1).

Ascaris lumbricoides L. in pigs, Honduras, p. 93 fig., Kreis, H. A. (1).

Ascarophis pacificus in Raja, Pleurogrammus, Myoxocephalus, Gymnacanthus, Alcichthys, Liparis, Stichaeus, Gadus, Eleginus and Theragra spp., p. 63 fig., curvicauda in Hexagrammos octogrammus, H. lagocephalus, Hemiripterus villosus, p. 66 figs., curilica in Sebastodes trivittatus, p. 66 figs., japonicus in Agonomallus jordani and Brachyopsis rostratus, p. 69 figs., longispicula in Lumpenella mackayi, p. 70 figs., litoralica in Pholidapus dybowskii, Pholis pictus, and Zoarces elongatus, p. 73 figs., putjatini in Hemitripterus villosus, p. 75 figs., spp. nov., Sea of Japan, Zhukov, E. V. (2).

(Aspiculus) subgen. nov., Procamallanus, type: P. (A.) aspiculus Khera, p. 136, Ali, S. M. (1).

Atractidae Railliet, constitution, p. 465, Chabaud, A. G. & Petter, A. J.

Atractis impura Caballero in large int. of Kinosternon cruentatum, p. 454 figs., caballeroi sp. nov. in large int. of K.c., p. 457 figs., Costa Rica, Brenes, R.-R. & Bravo-Hollis, M.—A. daciylura Duj. in Testudo, p. 20 figs., Forstner, M. J.

Brevibucca punctata sp. nov., E. Pakistan, p. 252 fig., Timm, R. W. (2).

Brugia gen. nov., Dipetalonematinae, defined, p. 77, type: B [Filaria] malayi (Brug), to incl. also Wuchereria pahangi Buckley & Edeson and W. patei Buckley, Nelson & Heisch, p. 75 figs., Buckley, J. J. C.

Brumptaemilius sclerophorus Dollfus redescr. from a diplopod, Tanganyika, p. 403 figs., Osche, G.

Buccolaimus gen. nov., Monhysteridae, type: B. grahami sp. nov., Graham Land, p. 494 figs., Allgén, C. A.

Buckleyuris ezzati sp. nov. in Giraffa camelopardalis, London Zoo, also recorded from Gazella spp. and Ourebia montana, p. 150 fig., Sarwar, M. M. (1).

Bunonema madrasicum sp. nov., Madras, p. 45 fig., Kannan, S.

Bunostomum phlebotomum (Raill.) in cattle, Honduras, p. 62 figs., Kreis, H. A. (1).

Butlerius Goodey, key to spp., p. 214, Andrassy, I (11).

Camallanidae Raill. & Henry, constitution, p. 117, Yeh, L.-S. (3).

Camallaninae **subfam. nov.,** Camallanidae, pp. 117, 119, key to spp., **Yeh,** L.-S. (3).

Camallanus lissemysus sp. nov. in Lissemys (Punctata) punctata, India, p. 285 figs., Gupta, N. K. & Singh, S.—C. johni sp. nov. in int. of Xenopus sp., Tanganyika, p. 103 figs., Xeh, L.-S. (1).

Capillaria sp. innom. in sm. int. of Kinosternon cruentatum, Costa Rica, p. 451 figs., Brenes, R.-R. & Bravo Hollis, M.—C. bonneuillei sp. nov. in duodenum of Dipodomys ordii marshalli, Utah, p. 206 figs., Grundmann, A. W. & Frandsen, J. C. (2).—C. copyschi sp. nov. in sm. int. of Copyschus e. saularis, E. Pakistan, p. 879 figs., Gupta, S. P. (4).—C. obsignata Madsen redescr. from Pavo cristatus, U.S.A., p. 475 figs., Hwang, J. C. & Wehr, E. E.—C. exigua Duj. in Erinaceus europaeus, p. 594 figs., resecta Duj. in Garrulus glandarius, p. 598 figs., corvorum (Rud.) in Corvus corone, p. 600 figs., myoxinitelae (Dies.) in Eliomys quercinus, p. 602 figs., France, Le Van Hoa (1).—C. sibirica sp. nov. in stom. of Eutamias sibiricus, Russia, p. 766 figs., Romanov, I. V.—C. obsignata Madsen in Gallus gallus, Brazil, p. 192 figs., Teixeira de Freitas, J. F. & Jorge da Silva, A. A.—C. plagiaticia sp. nov. in int. of Aratinga cactorum caixana, Brazil, p. 2, Teixeira de Freitas, J. F. & Machado de Mendonça, J. (2).—C. curilica sp. nov. in Salvelinus lewomaenis, Sca of Japan, p. 80 figs., Zhukov, E. V. (2).

Carnoyidae fam. nov. for Carnoya Gilson, Rondonema Artigas, Angranema Trav., Brumptaemilius Dollfus and Clementeia Artigas, p. 518, Travassos, L. & Kloss, G. R.

Cephalobellus skaiei sp. nov. in Chersastus sp. (?), S. Africa, p. 413 figs., Osche, G.

Cephalobus Bastian, constitution, p. 163, (Heterocephalobus) kaczanowskii sp. nov., peat-moss, Poland, p. 164 figs., Brzeski, M. (I).—C. minor sp. nov., Madras, p. 47 fig., Kannan, S.

Chabertia ovina (Fabr.) in sheep, Brazil, p. 56 figs., Kreis, H. A. (1).

Chambersiella Cobb redefined, p. 752, key to spp., p. 753, Sanwal, K. C. (1).

Choanolaimus psammophilus de Man from sand-dunes, California, p. 57 figs., Chitwood, B. G. (1).

[

All

syle

A

Chronogaster magnificus sp. nov., p. 4 figs., sp. innom. p. 7 figs., French W. Africa, Andrássy, I. (1).

Clementeinae subfam. nov., Carnoyidae, for Clementiae Artigas, p. 518, Travassos, L. & Kloss, G. R.

Cobbonchus Andrássy, redefined and review of spp., p. 275, chauliodus p. 279 figs., pounamua p. 281 figs., spp. nov., New Zealand, Clark, W. C. (5).

Contracaecum ogmohini [sc. ogmorhini] Johnst. & Mawson (syn. corderoi Lent & Freitas) in Arctocephalus sp., Amsterdam I., p. 191 figs., Campana-Rouget, Y. & Paulian, P.—C. (C.) haliaëti (Baylis & Daubney) redescr. from Haliastur indus, E. Pakistan, p. 319 figs., Gupta, S. P. (1).

Cooperia oncophora (Raill.) in sheep, Honduras, p. 73 figs., pectinata Ransom in cattle, Honduras, p. 74 figs., **Kreis**, H. A. (1).

Criconema celetum sp. nov. from Saintpaulia sp., Cauada, p. 913 figs., Wu, L.-Y. (3).

Cryptaphelenchoides gen. nov., Aphelenchidae, defined, type: C. [Aphelenchoides] macrobulbosus (Rühm) p. 118, Goodey, J. B. (2).

Cucullanus dogieli sp. nov. in Rutilus, Leuciscus, Barbus, Alburnus, Alburnoides, Blicca and Vimba spp., Litovsk, Russia, p. 173 figs., Krotas, R. (2).—C. Müller: review of spp. in pleuronectiform fishes, p. 845, annulatus sp. nov. in int. of Parophrys vetulus, British Columbia, p. 839 gs., Margolis, L.

Cyathostomum coronatum Lss. in horses, Brazil, p. 49 fig., Kreis, H. A. (1).

Cylicocercus catinatus Lss. in horses, Brazil, pl 51 figs., Kreis, H. A. (1).

Cylindrocorpus Goodey redefined, p. 42, erectus sp. nov. associating with Scolytus multistriatus in American elm, U.S.A., Massey, C. L. (2).

Cyrtosomum longicaudatum sp. nov. in large int. of Ctenosaura s. similis, Costa Rica, p. 459 figs., Brenes, R.-R. & Bravo-Hollis, M.

Deladenus Thorne, key to spp., p. 7, aridus sp. nov., p. 3 figs., saccatus Andrassy, p. 7 figs., Hungary, Andrássy, I. (2).

Diastolaimus Rahm a syn. of Chambersiella Cobb, p. 782, Sanwal, K. C. (1).

Dictyocaulus viviparus (Bloch) in cattle, Honduras, p. 79 figs., **Kreis,** H. A. (1).—D amfieldi (Cobbold) redescr. from donkey, Egypt, p. 191 figs., **Soliman,** K. N.

Diplobathylaimus gen. nov., Tripyloididae, type: D. grahami sp. nov., Graham Land, p. 490 fig., Allgén, C. A.

Diplogaster bandelieri sp. nov. on Ips confusus, New Mexico, p. 19 figs., Massey, C. L. (1).

Diplolaimelloides gen. nov., Monhysteridae, defined, p. 95, type: D. [Diplolaimella] islandica (de Coninck) p. 96 figs., altherri sp. nov., p. 97 figs., Germany, Meyl, A. H. (1).

Diploscapter orientalis sp. nov., Madras, p. 46 figs., Kannan, S.

Diplotriaena Henry & Ozoux (syn. Diplotriaenoides Walton) revised, campanae in Lamprotornis australis, S. Africa, p. 218 fig., chabaudi in Prinia gracilis lepida, India, p. 219 fig., dolffusi in Trochalopterons canorus, China, p. 224 fig., golvani in Dicrurus bracteatus assimilis, New Guinea, p. 230 fig., leiperi in Lissotis m. melanogaster,

N. Rhodesia, p. 231 g., urocissoides in Urocissa melano-cephala occipitalis, India, p. 254 fig., spp. nov., Anderson, R. C. (1).

Dispharynx spiralis (Molin) redescr. from Gallus gallus, Brazil, p. 199 figs., Telxeira de Freitas, J. F. & Jorge da Silva, A. A.

Ditylenchus destructor Thorne, morphol. note, p. 47 figs., Wu, L. Y.

Dolichodorus profundus sp. nov. in soil, Togo, p. 1 figs., Luc, M. (1).

Dolicholaimus de Man, key to spp., p. 351, raskii sp. nov., California, p. 352 figs., Chitwood, B. G. (2).

Dorylaimellus montenegricus Andrassy, China, p. 203 fig., Andrassy, I. (11).

Dorylaimus dahli, p. 775 fig., nyongi, p. 778 fig., spp. nov., Cameroons, Altherr, E. (1).—D. brunettii Meyl. French W. Africa, p. 17 figs., Andrássy, I. (1).—D. holdemani sp. nov., Bulgaria, p. 13 figs., Andrássy, I. (5).—D. afghanicus sp. nov., Afghanistan, p. 4 figs., Andrássy, I. (9).—D. barasubulatus sp. nov., Germany, p. 101 figs., Meyl, A. H. (1).—D. andrassyi sp. nov., Germany, p. 597 figs., Meyl, A. H. (2).

Dubioxyuris macroscelidis Ortlepp a syn. of Maupasina weissi Seurat, p. 190, Inglis, W. G. (1).

Edesonfilaria gen. nov., type: malayensis sp. nov. in peritoneal cavity of Macacus irus, Malaya, p. 125 figs., Yeh, L.-S. (4).

Ektaphelenchus macrostylus sp. nov. associating with Dendroctonus pseudotsugae, B.C., Canada, p. 91 figs., Khan, M. A. (1).

Elaphostrongylus rangiferi sp. nov. in Rangifer, Kola peninsula, p. 115 figs., Mitzkevich, V. Y.

Encephalonema gen. nov., Filariata, defined, p. 935, type: E. longimicrofilaria sp. nov. in brain of Pandion haliastus, Russia, p. 934 figs., Parukhin, A. M. & Oshmarin, P. G.

Enoplolaimus (Mesacanthion) brachycollis, p. 479 fig., (Oxyonchus) brachysetosus, p. 479 fig., (Paramesacanthion) paracanthospiculum, p. 480 fig., spp. nov., Graham Land, Allgén, C. A.

Enterobius atelis Cameron, p. 186, duplicidens Buckley, p. 189, lagothricus Buckley, p. 189, interlabiata Sandosham, p. 192, minutus (Schneider), p. 196, transf. to Trypanoxyuris, Inglis, W. G. & Diaz-Ungria, C.

Eucephalobus verrucosus, p. 47 fig., setensis, p. 48 figs., spp. nov., Madras, Kannan, S.

Eudorylaimus paracentrocercus (de Coninck), Congo, p. 101 fig., Andrassy, I. (7).—E. lindbergi sp. nov., p. 8 figs., sp. innom., p. 11 fig., Afghanistan, Andrássy, I. (9).—E. silvaticus sp. nov. in Sphagnum sp., Poland, p. 262 figs., Brzeski, M. (2).

Eufilaria mcintoshi sp. nov. in subcut. tissue of legregion of Padda oryziora, Java, p. 113 figs., Anderson, R. C. & Bennett, G. F.

Eumorpholaimus macrocirculus, p. 495 fig., grahami, p. 496 fig., sp. nov., Graham-Land, Allgén, C. A.

Eurystomatina filicolle sp. nov., Graham Land, p. 483, fig., Allgén, C. A.

Eurystomina ornatum (Eberth) redescr., California, p. 377 figs., Chitwood, B. G. (2).

Filaria martis Gmel. redescr. from Martes foina, Italy, p. 158, and from Pedetes caffer, Africa, p. 160 figs., Anderson, R. C. (2).

0]

on,

llus.

. &

47

igs.,

sp.

fig.,

eyl.

sy,

ny,

ina

in

ζS.,

ith

ζS.,

ola

35,

&

d,

to

I.

d

Filipjeviella tenuis sp. nov., Graham Land, p. 498 fig., Allgén, C. A.

Ganguleterakis micropis sp. nov. in int. of Apodemus sylvaticus, Czechoslovakia, p. 469 figs., Tenora, F. (2).

Gongylonema ingluvicola Ransom redescr. from Gallus gallus, Brazil, p. 202 figs., Teixeira de Freitas, J. F. & Jorge da Silva, A. A.

Grahamia gen. nov., Linhomoeidae, type: G. odhneri sp. nov., Graham Land, p. 497 fig., Allgén,

Greenenema Andrássy a syn. of Rogerius Hoeppli & Chu, p. 114, Andrássy, I. (8).

Gymnolaimus exilis (Cobb), French W. Africa, p. 9 fig., Andrássy, I. (1).

Haemonchus lunatus Trav. an anomalous form of contortus (Rud.), p. 197, Becklund, W. W.—H. contortus (Rud.) in sheep and cattle, Honduras and Brazil, p. 65 figs., Kreis, H. A. (1).

Halalaimus filicaudatus sp. nov., S. Georgia and Falkland Is., p. 478 fig., Allgén, C.—H. terrestris sp. nov. from North Sea coast of Germany, p. 464 figs., Gerlach, S. A.

Halichoanolaimus nemurus, p. 485 fig., striatilaimus, p. 486 fig., spp. nov., Graham Land, Allgén, C. A.

Hemicriconemoides chitwoodi, p. 64 figs., minutus, p. 66 figs., strictathecatus, p. 67 figs., spp. nov., in soil, Florida, Esser, R. P.

Hemicycliophora typica De Man, fresh water, Estonia, p. 199 fig., Krall, E.

Heterakis yani sp. nov. in caecum of Anas domestica, China, pp. 104, 110 figs., Hsü, W.-n.

(Heterocephalobus), subgen. nov., Cephalobus, type: C. (H.) kaczanowskii sp. nov., peat-moss, Poland, p. 164 figs., key to spp., p. 165, Brzeski, M. (1).

Heterodera Schmidt: markings and patterns of cystwall, structure of vulval cone, p. 24 figs., Goffart, H. (5).—H. cruciferae Franklin, morphology, England, Mackintosh, C. M.

Hydromermis churchillensis sp. nov. in Aedes communis, Canada, p. 465 figs., Welch, H. E. (1).—H. contorta (Linst.) (syn. rivicola Corti), England, p. 92 figs., Welch, H. E. (3).

Impalaia tuberculata Monnig var. longispiculata in Lithocranius walleri and experimentally in Capra hircus, p. 138 figs., Wetzel, R. & Fortmeyer, H. P.

Iotonchus (Mononchus) daday Micol., Cameroons, p. 782 fig., Altherr, E. (1).—I. Cobb redefined p. 260, basidontus p. 261 figs., maragnus p. 263 figs., ophiocercus p. 266 figs., spp. nov., parazeshokkei (Allgén) p. 269 figs., New Zealand, Clark, W. C. (4).

Ironiae (de Man), key to genera, p. 350, Chitwood,

Ironus luci sp. nov., French W. Africa, p. 13 figs., Andrássy, I. (1).

Kalicephalus macrovulvus Caballero in Bothrops a. atrox, Costa Rica, p. 452 figs., Brenes, R.-R. & Bravo-Hollis, M.

Klossiella gen. nov., Cobboldinidae, defined, p. 62, type: K. iheringi (Trav., Artig. & Per.) n. comb., to incl. also K. testudinicola (Baylis) n. comb., p. 62, Goncalves da Costa, S. C.

Laimaphelenchus Fuchs, key to spp., p. 96, ulmi sp. nov. from bark of *Ulmus americana*, Canada, p. 93 figs., Khan, M. A. (1).

Leptolaimus puccinelliae sp. nov. from North Sea coast of Germany, p. 465 figs., Gerlach, S. A.

Leptosomatum ranjhai sp. nov., Karachi, p. 217 figs., Timm, R. W. (1).

Macracis papillosa sp. nov. in Testudo, p. 17 fig., Forstner, M. J.

Macrolaimus canadensis sp. nov. in frass of Phloeosinus canadensis, Quebec, p. 1127 figs., Sanwal, K. C. (3).—
R. W. (2).

Manistrongylus gen. nov., Trichostrongylidae, type: M. [Trichostrongylus] meyeri (Trav.) redescr. from Manis p. pentadactyla, Formosa, p. 781 figs., Cameron, T. W. M. & Myers, B. J.

Maupasininae Lopez-Neyra raised to family rank, p. 191, Inglis, W. G. (1).

Megadorus gen. nov., Aphelenchidae, defined, type: M. [Aphelenchoides] megadorus (Allen), p. 115, Goodey, J. B. (2).

Mehdiella microstoma (Drasche) p. 9 figs., inflata Drasche p. 10 figs., hamosa sp. nov., p. 14 figs., cordata sp. nov., p. 15 figs., in Testudo spp., Forstner, M. J.

Meloidodera Chitwood, Hannon & Esser redefined p. 939, type-species floridensis C., H. & E. redescr., p. 941 figs., charis sp. nov. female from Prosopis juliflora var. glandulosa, Texas, p. 945 figs., Hopper, B. E.

Meloidogyne kikuyensis sp. nov. attacking Pennisetum clandestinum, Kenya, p. 303 figs., De Grisse, A.

Mesodorylaimus szekeesyi sp. nov., China, p. 202 fig., Andrássy, I. (11).

Metoncholaimus Filipjev, key to spp., p. 366, longiovatum sp. nov., California, p. 368 figs., Chitwood, B. G. (2).

Microlaimus citrus sp. nov., North Sea coast of Germany, p. 465 figs., Gerlach, S. A.

Monhystera somereni Allgén, French W. Africa, p. 9 figs., Andrássy, I. (1).—M. filiformis Bast. var. salina var. nov., p. 91, paramacramphis sp. nov., p. 92 figs., Germany, Meyl, A. H. (1).—M. multisetosa sp. nov., Germany, p. 588 figs., Meyl, A. H. (2).

Mononchidae Chitwood, oral structures, p, 3, Andrássy, I. (4).—M. Chitw. & Chitw. redefined, p. 184, Clark, W. C. (2).

Mononchus abrupticaudatus sp. nov., Cameroons, p. 773 fig., Altherr, E. (1).—M. sphagni sp. nov. in sphagnum, Poland, p. 261 figs., Brzeski, M. (2).—M. Bastian redefined p. 185, truncatus Bastian, p. 185 figs., papillatus Bastian, p. 189 figs., Britain, Clark, W. C. (2).—M. composticola, p. 199 figs., mesadenus, p. 204 figs., propapillatus, p. 209 figs., spp. nov., New Zealand, Clark, W. C. (3).—M. jairi Lordello and tenuidentatus Kreis transf. to Iotonchus, pp. 261, 174, Clark, W. C. (4).

Monoposthia desmodoroides, p. 487 fig., grahami, p. 488 fig., spp. nov., Graham Land, Allgén, C. A.

Mylonchulus Cobb, key to spp., p. 8, Andrássy, I. (4).

Nematodirus filicollis (Rud.) in cattle, Honduras, and sheep, Brazil, p. 76 figs., Kreis, H. A. (1).

Nicollina phascogale sp. nov. in Phascogale flavipes, Queensland, p. 425 figs., Mawson, P. M. (1).

Nilonema gen. nov., Dracunculidae, defined p. 56, type: N. gymnarchi sp. nov. in air-bladder of Gymnarchus niloticus, Sudan, p. 55 figs., Khalil, L. F. (2).

Notocamacolaimus gen. nov., Camacolaimidae, type: N. australis sp. nov., Graham Land, p. 490 fig., Allgén, C. A.

Oesophagostomum venulosum (Rud.) in sheep, Honduras, p. 53 figs., Kreis, H. A. (1).

Oncholaiminae Filipjev, key to genera, p. 355, Chitwood, B. G. (2).

Oncholaimium Cobb, key to spp., p. 362, domesticum (Chitw. and Chitw.) n. comb., p. 363 figs., sheri sp. nov., p. 364 figs., California, Chitwood, B. G. (2).

Oncholaimus skawensis Ditlevs. redescr., p. 359 figs., dujardinioides sp. nov., p. 359 figs., California, Chit-wood, B. G. (2).

Ornithofilaria tuvensis sp. nov. in subcut. tissue of legs of Perdix daurica, Lyrurus tetrix, Tetrao urogallus and Lagopus mutus, Tuva Territory, Russia, p. 305 figs., Spassky, A. A. & Sonin, M. J.

Orthothominx gen. nov., Capillariinae, defined p. 195, type: O. [Capillaria] collaris (Linst.) redescr. from Gallus gallus, Brazil, p. 195 figs., Teixeira de Freitas, J. F. & Jorge da Silva, A. A.

Ostertagia ostertagi (Stiles) in cattle, Honduras, p. 71 figs., Kreis, H. A. (1).—O. (0.) wuhingensis sp. nov. in abomasum of Ovis aries, China, p. 114 figs., Ling, M. T. & Chow, S. C.

Oswaldocruzia melanosticti sp. nov. in sm. int. of Bufo melanostictus (type-host) and Rana tigrina, E. Pakistan, p. 748 figs., Gupta, S. P. (3).

Oxysomatium Raill. & Henry, systematic note, p. 145, srinagarensis sp. nov. in rectum of Bufo viridis, Kashmir, p. 141 figs., Fotedar, D. N.—O. brumpti (Trav.) redescr. from Bufo viridis, Poland, p. 221 fig., Kozlowska, J.

Oxyspirura (O.), key to spp., p. 240, prinia in orbital cavity of Prinia socialis stewarti, p. 222 figs., alauda in Alauda g. gulgula, p. 224 figs., lobipluvia in Lobipluvia malabarica, p. 226 figs., asiatica in Accipiter nisus, p. 228 figs., chrysomma in Chrysomma s. sinensis, p. 231 figs., buckleyi in Motacilla alba dukhunensis, p. 232 figs., lalagea in Lalage sykesii, p. 234 figs., yehi in Upupa epops orientalis, p. 236 figs., lerouxi in Turdus merula nigropileatus, p. 236 figs., spp. nov., India, All, S. M. (2).

Oxystomatina tenuicolle sp. nov., Graham Land, p. 478, Allgén, C. A.

Oxyuris robusta v. Drasche, p. 7 fig., dentata v. Drasche, p. 8 fig., lata sp. nov., p. 16 fig., in Testudo spp., Forst-ner, M. J.—O. equi (Schrank) in horses, Honduras and Brazil, p. 87 figs., Kreis, H. A. (1).

Panagrellus dubius sp. nov. in frass of Sternochetus lapathi, British Columbia, p. 1041 figs., Sanwal, K. C. (2).

Panagrobelus topayi sp. nov., Kenya, p. 195 figs., Andrassy, I. (10).

Paracanthonchus arcospiculum p. 484 fig., axonolaimoides p. 485 fig., spp. nov., Graham Land, Allgén, C. A.

Paragraphidium gen. nov., Graphidiinae, type: P. pseudosexradiatum sp. nov. in stom. of Myrmecophaga tridactyla, Brazil, p. 387, Teixeira de Freitas, J. F. & Machado de Mendonça, J. (3).

Parallintoshius urumiac sp. nov. in int. of Myotis nigricans, Brazil, p. 1 figs., Teixeira de Freitas, J. F. & Machado de Mendonça, J. (5).

Paraphanolaimus longisetosus sp. nov., Cameroons, p. 772 figs., Altherr, E. (1).

Parapharyngodon verrucosus sp. nov. in int. of Diploglossus lessonae, Brazil, p. 23 fig., Teixeira de Freitas, J. F. & Dobbin, J. E. (2).

Paraseinura gen. nov., Aphelenchoididae, defined p. 171, type: P. musicolus sp. nov. from rotting inflorescence of Musa paradisiaea, Pakistan, p. 171 figs., Timm, R. W. (4).

Parasitaphelenchus sp. innom. in body-cavity of Ips confusus. New Mexico, p. 17 figs., Massey, C. L. (1).

Parasitylenchus (P.) orthotomici sp. nov. associating with Ips laricis, Germany, p. 203 figs., Ruhm, W.

Parasitorhabditis proximi (Fuchs) associating with Ips proximus, p. 208 figs., sexdentati sp. nov. with I. sexdentatus, p. 210 figs., Germany, Rühm, W.

Paratylenchus marylandicus sp. nov., associated with pine-roots, Maryland, p. 175 figs., Jenkins, W. R.

Pareurystomina Micoletzky, key to spp., p. 378, atypica sp. nov., California, p. 378 figs., Chitwood, B. G. (2).

Pearsonema gen. nov., Capillariinae, defined p. 63, type: P. pearsoni sp. nov. in bladder of Procyon cancrinorus, Brazil, p. 64 figa., Tekseira de Freitas, J. F. & Machado de Mendonça, J. (1).

Perodira Baylis redefined, p. 78, pheretimae sp. nov. in testis sacs and seminal vesicles of Pheretima posthuma, East Pakistan, p. 78 figs., Timm, R. W. (5).

Philometra amazonica sp. nov. in body-cavity of Calophysus macropterus, Amazon, p. 16 figs., senticosa Baylis transf. to Philometroides, p. 15, Travassos, L.

Philometroides senticosa (Baylis) n. comb., redescr. from Arapaima gigas, Amazon, p. 15 figs., Travassos, L.

Philonema agubernaculum Simon & Simon in Salmo salar and Salvelinus fontinalis, Maine, biological notes p. 487, Meyer, M. C.

Polygastrophora de Man, systematic note, p. 373, septembulba Gerlach, California, p. 374 figs., Chitwood, B. G. (2).

Pontonema problematicum sp. nov., California, p. 370 figs., Chitwood, B. G. (2).

Porrocaecum (P.) haliasturi sp. nov. in sm. int. of Haliastur indus, p. 315 figs., E. Pakistan, Gupta, S. P. (1).—P. ensicaudatum (Zeder) redescr. from Turdus, Corvus, Garrulus, Sturnus spp., Britain, p. 259 figs., Mettrick, D. F. (4).

Prionchulus Cobb redefined p. 192, muscorum (Duj.) Britain, p. 194 figs., Clark, W. C. (2).

Procamallaninae subfam. nov., Camallanidae, pp. 117, 119, key to spp., Yeh, L.-S. (3).

Procamallanus Baylis, key to spp., p. 136, globoconchus on gills of Rita hastata, p. 131 figs., ophicephalus on gills of Ophicephalus punctatus, p. 132 figs., spp. nov., India, Ali, S. M. (1).

Pseudophysaloptera Baylis reduced to subgenus of Physaloptera, p. 329, soricina Baylis redescr. from Sorex araneus and Neomys fodiens, Russia, p. 327 figs., Morozov, C. F.

Pterothominx brevidelphis sp. nov. in stom. of Myotis nigricans, Brazil, p. 269 figs., Teixeira ce Freitas, J. F. & Machado de Mendonça, J. (4).

Rabbium gen. nov., Thelaziidae, defined p. 471, type: R. caballeroi sp. nov. in stom. of Leiocephalus carinatus, Bahamas, p. 472 figs., Chitwood, M. B.

5145

p.

es-

m,

Ips

ng

lps

th

ica

33,

m-

8

in

121

of

sa

m

p.

ď,

70

of

P.

ıs,

t-

.)

p.

218

of

a,

2

7.

is

Rhabditis guenini sp. nov., Switzerland, p. 211 figs., Altherr, E. (2).—R. obluse Fuchs in gut of Ips confusus, New Mexico, p. 17 figs., Massey, C. L. (1).—R. (Choriorhabditis) marine var. bengalensis Timm transf. to Pellioditis, p. 150, Timm, R. W. (3).

Rhabditoides coprophaga longicaudatus var. nov., Madras, p. 43 fig., Kannan, S.

Rhadinaphelenchus gen. nov., Aphelenchoididae, defined p. 99, type: R. [Aphelenchus] cocophilus (Cobb), redescr. from coconut stem, Trinidad, p. 99 figs., Goodey, J. B. (1).

Ritaklossia [Capillaria] annulata (Molin) n. comb. in Gallus gallus, Brazil, p. 189 figs., Teixiera de Freitas, J. F. & Jorge da Silva, A. A.

Rondonema Artigas reviewed, p. 511, caballeroi sp. nov. in post. int. of Neptunobolus redentor, Brazil, p. 512 figs., Travassos, L. & Kloss, G. R.

Rotylencheides Whitehead redefined p. 9, key to spp., p. 9, intermedius in roots of Drybetes cylmeri, p. 11 figs., pariocaudatus in soil, p. 12 figs., affinis in soil, p. 14 figs., spp. nov., Ivory Coast, Luc, M. (2).

Rotylenchus robustus (de Man) identity, neotype, described, p. 136 figs., goodeyi Loof & Oostenbr. redefined, p. 146, Goodey, J. B. & Seinhorst, J. W.

Rumai gen. nov., Philometridae, defined p. 18, type: R. rumai sp. nov. in body-cavity of Arapaima gigas, Amazon, p. 18 figs., Travassos, L.

Schneidernematinae Freitas, Seuratidae, defined p. 428 figs., Inglis, W. G. & Chabaud, A. G.

Schrankiana Strand defined, p. 13, schranki (Trav.) redeser. from Leptodactylus pentadactylus, p. 13 figs., larvata (Vaz) redeser. from Leptodactylus spp., p. 16 figs., formosula sp. nov. in Leptodactylus typhonius, Brazil, p. 20 figs., inconspicuata sp. nov. in int. of Leptodactylus pentadactylus subspp., Brazil, p. 22 figs., Teixeira de Freitas, J. F. (1).

Schrankianidae fam. nov., Subuluroidea, for Schrankiana Strand and Schrankianella n. gen., p. 12, Teixeira de Freitas, J. F. (1).

Schrankiella gen. nov., Schrankianidae, defined, p. 25, type: S. [Schrankia] brasili (Trav.) in Leptodactylus pentadactylus, Brazil, p. 25 figs., Telxeira de Freitas, J. F. (1).

Schrankiinae Skrj. & Shikh. emended to Schrankianinae, p. 12, Teixeira de Freitas, J. F. (1).

Setaria cervi (Rud.) in cattle, Honduras, p. 107 figs., Kreis, H. A. (1).

Seuratinema Johnst. & Mawson a syn. of Skrjabinema Gned., p. 430, Mawson, P. M. (2).

Seuratoidea Hall, systematics, p. 316 figs., Chabaud, A. G. et al.

Sinanema gen. nov., Axonolaimidae, defined p. 212, type: S. [Monhystrella] ginlingensis (Hoeppli & Chu), p. 212, Andrássy, I. (11).

Sphaerolaimus arcospiculum sp. nov., Graham Land, p. 495 fig., Allgén, C. A.

Sphaerularia bombi Khan and ungulacauda Khan transf. to Stictylus, p. 225, Khan, M. A. (2).

Spilophora gracilicauda gigantodon subsp. nov., Graham Land, p. 488 fig., Allgén, C. A.

Spirocamallanus pereirai (Annereaux) redescr. from Gillichthys mirabilis, California, p. 680 figs., Noble, E. R. & King, R. E.

Splendidofilaria kashmirensis sp. nov. in body-cavity of Molpastes I. leucogenys, Kashmir, p. 139 figs., Amir, S. & Ali, S. M.—S. quiscali (v. Linst.) n. comb. in Quiscalus quiscula versicolor, p. 18, Odetoyinbo, J. A. & Ulmer, M. J.

Stephanurus dentatus Dies in pigs, Honduras, p. 44 figs., Kreis, H. A. (1).

Strongylus equinus Müller, p. 35 figs., vulgaris (Lss.), p. 38 figs., edentatus (Lss.), p. 41 figs., in horses, Brazil, Kreis, H. A. (1).

Subulura ortleppi sp. nov. in Rhabdomys pumilio (typehost) and Rattus (Praomys) namaquensis, S. Africa, p. 126 figs., indica Khera a syn. of Tarsubulura perarmala (Ratz.) p. 134, vulpis Khera a syn. of Oxymema alata (Mazhar), p. 134, armata Vuylsteke transf. to Allodapa, p. 135, Inglis, W. G. (2).

Syngamus trachea (Mont.) (syn. skrjabini El'perin) in Corous and Sturnus, Britain, p. 262 figs., Mettrick, D. S. (4).

Synonchium obtusum Cobb, Florida, p. 58 figs., Chitwood, B. G. (1).

Syphacia srivastavi sp. nov., male in stom. of domestic pig, India, p. 505 figs., Sinha, P. K. (2).

Tachygonetria longicollis Schn. p. 3, figs., testudinis sp. nov., p. 5 figs., in Testudo spp., Forstner, M. J.

Tanqua Blanchard, key to spp., p. 111, Hsü, W.-n.

Telotylenchinae **subfam. nov.**, Tylenchidae, defined p. 6, to incl. *Telotylenchus* n. g. and *Pseudhalenchus* Tarjan, **Siddiqi.** M. R. (2).

Telotylenchus gen. nov., Tylenchidae, defined, p. 75, type: T. indicus sp. nov. from soil, India, p. 75 figs., Siddiqi, M. R. (2).

Tetrabothriostrongylus gen. nov., Trichostrongylidae, defined p. 427, type: T. mackerrasae sp. nov. in Phascogale flavipes, Queensland, p. 427 figs., Mawson, P. M. (1).

Thalassironus britannicus de Man, types redescr., p. 354 figs., Chitwood, B. G. (2).

Thelandros salamandrae sp. nov. in rectum of Aneides hardii (type-host), A. luguiris and A. flavipunciatus New Mexico, p. 115 figs., Schad, G. A.

Thelastoma dollfusi sp. nov. in a diplopod, Tanganyika, p. 411 figs., Osche, G.—T. macramphidum Christie var. gallica Theodoridėes redescr. from larva of Cetonia aurata, France, p. 494 fig., Theodorides, J.

Theristus bathylaimus, p. 491 fig., brachysetosus, p. 492 fig., grahami, p. 492 fig., acanthospiculum, p. 493, macrocirculus, p. 493 fig., spp. nov., Graham Land, Allgen, C. A.—T. ruffoi sp. nov., R. Adige, Italy, p. 169 figs., Andrassy, J. (6).—T. spirus sp. nov., North Sea coast of Germany, p. 467 figs., Gerlach, S. A.

Thominx bohmi (Supperer) differentiated from T. aerophilus (Crepl.), p. 205 figs., Zarnowski, E. & Patyk, W.

Thoonchus ferex Cobb, redescr., California, p. 371 figs., Chitwood, B. G. (2).

Thornia Meyl, list of spp., p. 13, gubernaculifera sp. nov., Hungary, p. 9 figs., Andrássy, I. (3).—T. regiusi sp. nov., Germany, p. 599 figs., Meyl, A. H. (2).—T. dorylaimoides sp. nom. nov. pro Dorylaimus meyli Paetz., 1958, nec Andrássy, p. 81, Paetzold, D.

Tobrilus sp. with double vulva, Hungary, p. 111 figs., Andrássy, I. (8).—T. vistula sp. nov., nr. Warsaw, p. 249 figs., Pieczynska, E.

Toxocara canis Werner in dogs, p. 97 figs., mystax (Zeder) in cats, p. 101 figs., Honduras, Kreis, H. A. (1).

Trichodorus mirzai p. 22 figs., acaudatus p. 26 figs., spp. nov., India, Siddiqi, M. R. (1).

Trichostrongyloidea Leiper, classification, p. 473 figs., Chabaud, A. G.

Trichostrongylus meyeri Trav. transf. to Manistrongylus, p. 783, Cameron, T. W. M. & Myers, B. J.—T. axei (Cobbold) in horse, Brazil, p. 69 figs., Kreis, H. A. (1).

Trichuris didelphis sp. nov. in int. of Didelphis virginiana, Georgia, p. 458 figs., Babero, B. B. (2).—T. campanula v. Linst. in domestic cat, Bahamas, p. 319 figs., Clarkson, M. J. & Owen, L. N.—T. ovis (Abldg.) in sheep, Brazil, p. 31 figs., Kreis, H. A. (1).

Trypanoxyuris Vevers revised, p. 176 figs., Inglis, W. G. & Diaz-Ungria, C.

Ularofilaria Lyubimov a syn. of Ornithofilaria Gönnert, p. 305, Spassky, A. A. & Sonin, M. J.

Viguiera dicrurusi sp. nov. in stom. of Dicrurus macro-cercus albirctus, E. Pakistan, p. 579 figs., Gupta, S. P. (2).

Viscosia parafalklandiae, p. 481 fig., grahami, p. 482 fig., spp. nov., Graham Land, Allgéa, C. A.—V. papillatoides sp. nov., California, p. 365 figs., Chitwood, B. G. (2).

Witoldinema gen. nov., Dorylaiminae, defined p. 262, type: W. stefanskii sp. nov. in moss-cushions, p. 264 figs., Brzeski, M. (2).

Xiphinema obtusum Thorne, Congo, p. 104 figs., Andrássy, I. (7).—X. diversicaudatum (Micoletz.) redescr. from Britain, Netherlands and U.S.A., p. 129 figs., Goodey, J. B. et al.

Zeylanema gen, nov., Camallanidae, defined p. 107, type: Z. [Camallanus] anabantis (Pearse) in Anabas testudineus, Puntius filamentosus, Rasbora daniomius; to incl. also pearsei sp. nov. in R. dan. and A. test., p. 111 figs., kulasirii sp. nov. in A. test. and Ophicephalus punctatus, p. 112 figs., fernandoi sp. nov. in Ophicephalus spp., 114 figs., Ceylon, Yeh, L.-S. (2).

## **NEMATOMORPHA**

Neochordodes columbianus sp. nov. from man, Columbia, p. 525 figs., Faust, E. C. & Ramos, D. B.

#### **ACANTHOCEPHALA**

Allorhadinorhynchus gen. nov., Rhadinorhynchidae, defined, p. 325, type: A. segmentatum sp. nov. in sm. int. of Hyporhamphus sayori, Japan, p. 324 figs., Yamaguti, S. (1).

Echinorhynchus melanoglaeae sp. nov. in Melanoglaea ventralis, Senegal, p. 394 figs., Dollfus, R. P. (11).

(Echinorhynchus) subgen. nov., Echinorhynchus, defined, p. 361, to incl. gadi (Zoega), lotellas Yamag., dissimilis Yamag., leidyi Van Cl., cotti Yamag., attenuatus Linton, cherchiae Montic., estodicola v. Linst., abyssicola Dollfus, Golvan, Y. J. (2).

Fresnyarhynchus gen. nom. nov. pro Bolborhynchus Achmerov & Dombrowskaya-Achmerova, 1941, preocc., type: F. [Bolborhynchus] exiguus (A. & D.-A.), p. 354, Golvan, Y. J. (2).

Hypoechinorhynchidae fam. nov., Palaeacanthocephala, for *Hypoechinorhynchus* Yamag., p. 352 fig., Golvan, Y. J. (2).

Illiosentis edmondsi sp. nom. nov. pro furcatus of Edmonds, 1957, p. 159, Golvan, Y. J. (1).

Leptorhynchoides ovicephalus sp. nov. in Liopsetta obscura, Sea of Japan, p. 90 figs., Zhukov, E. V. (2).

Macracanthorhynchus hirudinaceus (Pallas) in pigs, Honduras, p. 109 figs., Kreis, H. A. (1).

Mediorhynchus pauciuncinatus sp. nov. in int. of Saltator albicollis peruvianus, Peru, p. 392 figs., Dollfus, R. P. (1); M. kuntzi sp. nov. in Burhinus senegalensis, Egypt, p. 612 figs., Ward, H. L.

Metacanthocephaloides gen. nov., Echinorhynchidae, defined, p. 322, type: M. zebrini sp. nov. in sm. int. of Zebrias zebrinus, Inegocia meerdervoorti, Pleuronichthys cornutus and Paralichthys olivaceus, Japan, p. 320 figs., Yarnaguti, S. (1).

Metacanthocephalus gen. nov., Echinorhynchidae, defined, p. 320, type: M. pleuronichthydis sp. nov. in sm. int. of Pleuronichthys cornutus, Japan, p. 320 figs., Yamaguti, S. (1).

Metarhadinorhynchus gen. nov., Rhadinorhynchidae, defined, p. 323, type: M. lateolabracis sp. nov. in sm. int. of Lateolabrax japonicus, Japan, p. 322 figs., Yamaguti, S. (1).

Neoacanthocephaloidinae subfam. nov., Echinorhynchidae, for Neoacanthocephaloides Cable & Quick, p. 355, Golvan, Y. J. (2).

Neoechinorhynchus emyditoides sp. nov. (syn. N. emydis of Bravo-H., 1946, nec Leidy) in Pseudemys scripta elegans (type-host), Emys blandingii and Chrysemys ornala, N. America, p. 257 figs., Fisher, E. M.—N. paraguayensis sp. nov. in int. of "peixe-martin", Paraguay, p. 379 figs., Machado F., D. A. (2).

Neogorgorhynchus gen. nov., Gorgorhynchidae, defined p. 150, type: N. [Rhadinorhynchus] aspinosus (Fukui & Morishita), p. 151, to incl. also nudus (Harada), p. 151, Golvan, Y. J. (1).

Onicola canis (Kaupp) in cats, Honduras, p. 112 figs., Kreis, H. A. (1).

Paracanthocephalidae fam. nov., Palaeacanthocephala, for Paracanthocephalus Achm. & Dombrow.-Achm. and Fresnyarhynchus Golvan., p. 353, Golvan, Y. J. (2).

Palaeacanthocephala Meyer, classification, p. 136 figs., Golvan, Y. J. (1), p. 350 figs., Golvan, Y. J. (2).

Palliolisentis gen. nov., Quadrigyridae, defined p. 80, type: P. quinqueungulis sp. nov. in int. of Triportheus paranensis (type-host) and T. a. angulatus, Brazil, p. 81 figs., ornalus sp. nov. in int. of T. paranensis, p. 83 figs., Paraguay, Machado F., D. A. (1).

Plagiorhynchidae fam. nov. to incl. subfams. Plagiorhynchinae Meyer, Sphaerechinorhynchinae Golvan and Porrochinae Golvan, p. 575, Golvan, Y. J. (3).

Polyacanthorhynchus Trav. reviewed, p. 429, caballeroi sp. nov. in int. of Caiman sclerops, Venezuela, p. 430 figs., Diaz-Ungria, C. & Rodrigo, A. G.

Prosthorhynchus cylindraceus (Gze.) larva in Armadillidium vulgare, France, p. 347 figs., Dollfus, R. P. & Dalens,

Sphaerechinorhynchinae subfam. nov., Plagiorhynchidae, for Sphaerechinorhynchus Johnst. & Deland, p. 580, Golvan, Y. J. (3).

Vancleaveinae [sic] subfam. nov., Cavistomatidae, for Cleaveius Subramanian and Micracanthorhynchina Strand, p. 364, Golvan, Y. J. (2).

1

of

setta

igs,

P.

lae,

. of

thys

gs.,

ae,

an-

ae,

m.

10-

p.

dis

179

ed

51,

8.,

0-

n,

38

10,

81

1).

d,

# ROTIFERA GASTROTRICHA ECHINODERIDA CHAETOGNATHA

# SUBJECT INDEX

#### GENERAL

Address.—Note to students of Rotifera, Gallagher, J. J.

Taxonomy.—Systematic note on Synchaeta oblonga, Donner, J.; Taxonomy of Chaetognatha in the Pacific, Tokioka, T. (1).

Technique.—Culture of Philodina roseola, Asahina, E.; Synxenic cultivation of rotifers, Dougherty, E. C. et al.

#### STRUCTURE

Musculature.-Of Chaetognatha, Barth, R.

Reproductive system.—Female reproductive complex in chaetognaths, Ghirardelli, E. (2).

Histology.—Of musculature in Chaetognaths, Barth, R.

Variation.—Morphological variation in Keratella cochlearis, Parise, A.

## PHYSIOLOGY

Growth.—Relative growth in Sagitta enflata, Massuti, M.

### REPRODUCTION AND DEVELOPMENT

Reproduction.—In Conochiloides coenobasis, Bogoslowsky, A. S.; In Spadella cephaloptera, Ghirardelli, E. (1); In chaetognaths, Ghirardelli, E. (3).

EVOLUTION AND GENETICS

Phylogeny.—Of the Chaetognatha, Hadži, J.

# **ETHOLOGY**

Bionomics.—Bionomics of rotifers in R. Sokoto, Nigeria, Green, J.; Hydrobiology of rotifers in R. Sokoto, Nigeria, Holden, M. J. & Green, J.; Vertical distribution of rotifers in Polish lakes, Kosicki, S.; Annual succession of rotifers in Lake Shikotsu, Japan, Kurohagi, T. (1); Vertical distribution of Synchaeta oblonga in Lake Shikotsu, Japan, Kurohagi, T. & Sasaki, S.; Limnology of rotifers in Lake Vlasina, Milovanovič, D. & Živković, A.; Food of Sagitta, Mironov, G. N.; Hydrobioogy of chaetognaths in the Florida Current, Owre, H. B.; Biology of Eosphora nayas, Pourriot, R.; Limnological notes on rotifers, Pravda, O., Bican, J. & Brom, F.; Biology of Polyarthra delichoptera populations, Ruttner-Kolisko, A.; Limnological notes on rotifers in Thüringen, Schräder, T.; Limnology of rotifers in Sedlice reservoir, Siádečková, A.; Limnology of rotifers in Sedlice reservoir, Czechoslovakia, Stepánek, M. & Cervenková, E.; Hydrobiology of chaetognaths in the Pacific, Tokioka, T. (1); Biological notes on Philodina, Trousil-Linhart, W.; Rotifer-galls on algae, Weber, W.; Capture of

prey by Collotheca, Wright, H. G. S. (1); Limnology of rotifers in a reservoir in Morava river-basin, Zelinka, M.

Ecology.—Ecology of planktonic rotifers in the Ocqueoc River system, Michigan, Beach, N. W.; Ecological notes on rotifers of ephemeral pools, Klement, V.; Ecology of rotifers in Lake Aydat, Larue, R.; Ecology of rotifers in lakes of Balkan peninsula, Serafimova-Hadzišče, J.; Ecology of rotifers in the Szecezecin Lagoon, Poland, Wiktor, J.

## GEOGRAPHICAL DISTRIBUTION

Europe.—Rotifera in fauna of the Bukk Highlands, Hungary, Abrahám, A. et al.; New Polyarthra sp. from Czechoslovakia, Albertova, O.; Notholea spp. in Rybinsk reservoir, Butorina, L. G. et al.; Rotifera from fish-ponds in Mydluiki, Poland, Czapik, A.; Synchatta oblonga in Moravia, Donner, J.; Rotifera from Czechoslovakia, Dvořáková, M. (1); Rotifera from the Ostrava district, Dvořáková, M. (2); Rotifera in fauna of Leeds-Liverpool Canal, Galliford, A. L.; Freshwater rotifers from Nieuport, Gillard, A.; Rotifera fauna of Danube tributaries near Baja, Hungary, Kol, E. & Varga, L.; Planktonic Rotifera from southern Moravia, Kubiček, F.; Rotifera in fauna of Lake Aydat, France, Larue, R.; Rotifera from the Ria de Vigo, N.W. Spain, Margalef, R.; Albertia vermicularis redescribed from Allolobophora, Wales, Rees, B.; Planktonic rotifers in the Port of Ostend, Ridder, M. De (1); Rotifera from the Camargue, Ridder, M. De (3); Rotifera from Rumania, Rodewalder, M. De (3); Rotifera from the Biesbosch, Netherlands, Vaas, K. F.; Rotifera from the Garam River, Hungary, Varga, L.; Rotifera of East Norfolk, Wright, H. G. S. (2); Rotifera from acid waters of the Dübener Heath, Germany, Wulfert, K. (1), (2).

Asia.—Rotifers in plankton of Lake Chimikeppu-ko, Japan, Kurohagi, T. (2); Rotifers of inland waters, Japan, Yamamoto, K. (1)–(6); Distribution of Kellicottia longispina in Japanese lakes, Yamamoto, K. (7); Japanese Rotifera, Yamamoto, K. (8).

Africa.—Chaetognatha off Freetown, Sierra Leone, Bainbridge, V.; Chaetognaths in plankton of West Africa, Furnestin, M. L. (2); Rotifera from R. Sokoto, Nigeria, Green, J.; Planktonic rotifers in Upper Egypt, Waurik, F.

N. America.—Chaetognaths in surface waters of Delaware Bay, Deevey, G. B.; New Echinoderes sp. from Puget Sound, Higgins, R. P.; Chaetognaths from the N.E. coast of Honduras, Suárez-Caabro, J. A. & Madruga, J. E.

S. America.—Chaetognatha from Brazil, Almeido Prado, M. S. de (1); New Sagitta sp. from Brazil, Almeido Prado, M. S. de (2).

New Zealand.—Rotifera in New Zealand and outlying islands, Russell, C. R.

Mediterranean.—Chaetognaths off east coast of Corsica, Furnestin, M.-L. (1).

Pacific Ocean.—Distribution of chaetognaths in the Pacific, Tokioka, T. (1); Chaetognaths in lagoon, New Caledonia, Tokioka, T. (2).

Antarctica.—Chaetognaths of the Antarctic and Subantarctic regions, Guaita, E. F.

[

To

# SYSTEMATIC INDEX

#### ROTIFERA

Adineta gracilis Janson, p. 330 fig., steineri Bartos, p. 330 fig., bartosi sp. nov., p. 330 fig., Germany, Wulfert, K. (2).

Albertia vermicularis Duj. redescr. from Allolobophora caliginosa, Wales, p. 61 figs., Rees, B.

Ascomorpha ecaudis Perty, p. 314 figs., saltans Bartsch, p. 315 figs., Germany, Wulfert, K. (2).

Ascomorphella volvocicola Wiszn., Germany, p. 316 fig., Wulfert, K. (2).

Aspelta mollis sp. nov., Rumania, p. 456 ags., Rode-wald-Rudescu, L.

Beauchampia crucigera (Dutrochet), Germany, p. 317, Wulfert, K. (2).

Brachionus calyciflorus var. amphiceros forma forficula f. nov., p. 459 figs., dimidiatus Bryce, p. 460 fig., dimidiatus var. quartaria de Beauch. p. 461 fig., forficula var. semiangularis var. sev., p. 462 fig., Rumania, Rodewald-Rudescu, L.

Cephalodella armata sp. nov., Rumania, p. 464 figs., Rodewald-Rudescu, L.—C. auriculata (Müll.), p. 267 figs., derbyi D.-Nutt. & Freeman, p. 268 fig., gibba Ehrbg., p. 268 fig., gibboides Wulfert, p. 269 fig., gracilis (Ehrbg.) p. 269 figs., horni sp. nov., p. 269 fig., incila Wulfert, p. 270 fig., intuta Myers, p. 271 fig., labiosa Wulfert, p. 271 fig., minora sp. nov., p. 271 fig., pachydactyla Wulfert, 272 fig., ventripes D.-Nutt. var. angusta Donner, p. 273 figs., Germany, Wulfert, K. (1).—C. gibba (Ehrbg.), p. 318 figs., urighti sp. nov., p. 318 figs., Germany, Wulfert, K. (2).

Chromogaster ovalis (Bergd.), Germany, p. 273 fig., Wulfert, K. (1).

Collotheca ornata cornuta (Dobie), Germany, p. 273 figs., Wulfert, K. (1).

Colurella obtusa (Gosse), p. 274 fig., uncinata bicuspidata (Ehrbg.), p. 274 fig., Germany, Wulfert, K. (1).

Conochiloides deltaicus sp. nov., Rumania, p. 453 figs., Rodewald-Rudescu, L.

Cytonia tuba (Ehrbg.), Czechoslovakia, p. 215 figs., Dvořáková, M. (1).

Dicranophorus lutkeni (Bergd.), p. 275 fig., Germany, Wulfert, K. (1).—D. robustus H. & M., Germany, p. 319 fig., Wulfert, K. (2).

Dissotrocha aculeata (Ehrbg.), p. 292 fig., macrostyla (Ehrbg.), p. 293 fig., Germany, Wulfert, K. (1).

Diurella Bory de St. Vincent, key to spp., p. 84 figs., Yamamoto, K. (6).

Dorystoma caudata (Bilfinger), p. 320 fig., furcata Wulfert, p. 321 fig., Germany, Wulfert, K. (2).

Elosa woralli Lord, Germany, p. 275 fig., Wulfert, K. (1).

Encentrum longipes sp. nov., p. 276 fig., sorex Wulfert, p. 277 fig., Germany, Wulfert, K. (1).

Eosphora naias Ehrbg., Germany, p. 321 figs., Wulfert, K. (2).

Eothinia elongata (Ehrbg.), Germany, p. 322 fig., Wulfert, K. (2).

Epiphanes clavulata (Ehrbg.), Czechoslovakia, p. 215 fig., **Dvořákova**, M. (1).

Erignatha clastopis (Gosse), Germany, p. 322 fig., Wulfert, K.

Euchlanis meneta Myers, p. 277 fig., triquetra (Ehrbg.), p. 277 figs., Germany, Wulfert, K. (1).

Floscularia ringens (L.) Germany, p. 323 figs., Wulfert, K. (2).

Gastropus hyptopus (Ehrbg.), Germany, p. 278 fig., Wulfert, K. (1).—G. hyptopus (Ehrbg.), p. 323 fig., stylifer Imhof, p. 324 fig., Germany, Wulfert, K. (2).

Itura globata sp. nov., Rumania, p. 455 figs., Rode-wald-Rudescu, L.

Lecane paxiana Hauer, Czechoslovakia, p. 218 figs., Dvořákova, M. (1).—L. carpatica sp. nov., Rumania, p. 463 figs., Rodewald-Rudescu, L.—L. (Monostyla) acus (Harring), p. 278 fig., (M.) closterocerca (Schmarda), p. 279 fig., (M.) guileti (Tarnogr.), p. 281 fig., (M.) guileti (Tarnogr.), p. 281 fig., (M.) agaleata, p. 282 fig., (M.) lunaris (Ehrbg.), p. 283 fig., agilis (Bryce), p. 279 fig., flexilis (Gosse), p. 280 fig., glypia Harr. & Myers, p. 280 fig., haliclysta Harr. & Myers, p. 281 fig., inermis (Bryce), p. 281 fig., intrasinuata (Olofs.), p. 282, luna (Müll.), p. 283 fig., (M.) physalis Wulfert, p. 283 fig., Germany, Wulfert, K. (1).

Lepadella acuminata (Ehrbg.) p. 283 figs., glossa sp. nov., p. 284 fig., patella (Müll.), p. 284 figs., Germany, Wulfert, K. (1).—L. Bory de St. Vincent, key to spp., p. 189 figs., Yamamoto, K. (4).

Lindia virgata, p. 457 figs., sphagnophila, p. 458 fig., spp. nov., Rumania, Rodewald-Rudescu, L.

Lophocaris gracilis sp. nov., Czechoslovakia, p. 217 figs., Dvořáková, M. (1).

Macrotrachela musculosa (Milne), p. 293 fig., quadricornifera Milne, p. 294 fig., Germany, Wulfert, K. (1).

Microcodides robustus (Glascott), Germany, p. 286 fig., Wulfert, K. (1).

Monominata actioss Myers, p. 287 fig., caudata Myers, p. 287 fig., pseudophoxa sp. nov., p. 289 fig., cerberus (Gosse), p. 289 fig., copeus Ehrbg., p. 290 figs., Germany, Wulfert, K. (1).

Notommata gkyphura Wulfert, p. 324 fig., omentata Wulf., p. 325 fig., voigti Donner, p. 325 fig., Germany, Wulfert, K. (2).

Philodina roseola (Ehrbg.), Germany, p. 294 fig., Wulfert, K. (1).

Polyarthra pseudoproloba sp. nov., Czechoslovakia, p. 16 figs., Albertová, O.

Proales parasita (Ehrbg.), p. 326 fig., wesenbergi sp. nov., p. 326 fig., Germany, Wulfert, K. (2).

Rotaria macrura (Ehrbg.), p. 295 fig., macrocres (Gosse), p. 295 fig., rotatoria (Pallas), p. 295 fig., Germany, Wulfert, K. (1).

Squatinella bifurca (Bolton), p. 327 fig., rastrum (Schmarda), p. 327 fig., similis sp. nov., p. 327 fig., Germany, Wulfert, K. (2).

Synchaeta oblonga Ehrbg., systematic note, Moravia, p. 26 figs., **Donner**, J.—S. pontica, p. 451 fig., razelmi, p. 452 fig., **spp. nov.**, Rumania, **Rodewald-Rudescu**, L.

Trichocerca brachyura (Gosse), p. 328 fig., porcellus (Gosse), p. 328 fig., rattus (Müller), p. 329 figs., pocillum (Müll.), p. 329 figs., Germany, Wulfert, K. (2).—T. Lamarck, key to spp., p. 81 figs., Yamamoto, K. (6).

Trichotria similis var. longidactyla var. nov., Rumania, p. 465 figs., Rodewald-Rudescu, L.

Wulfertia ornata Donner, Germany, p. 329 fig., Wulfert, K.

g.),

fig.,

fig.,

de-

gs., nia, pla) la), M.) ig., ig.,

tra-

M.)

1).

sp.

ny,

p.,

g.,

17

hi-

g.,

y,

ıta

p.

),

13

#### **ECHINODERIDA**

Echinoderes Claparède, key to spp., p. 89, pennaki sp. nov., Puget Sound, N. America, p. 86 figs., Higgins, R. P.

#### CHAETOGNATHA

Sagitta ferox f. americana forma nov. p. 353 figs., neodecipiens sp. nov., p. 377 figs., Eastern Pacific, Tokioka, T. (1).—S. glorias sp. nov., off coast of S. Brazil, p. 275 figs., Almeida Prado, M. S. de (2).

# ANNELIDA, GEPHYREA CONODONTA SCOLECODONTA

# SUBJECT INDEX

# GENERAL

Reviews: Monographs.—Of the researches of Dr. E. Caballero y C. on Mexican Hirudinea, Moore, J. P.; †General study of fossil identification, Chavan, A. & Cailleux, A.; Recent and fossil Vermes, Kegel, W.; †Characteristics of the Conodonta and Scolecodonta, Pokorný, V.; Problems of conodont classification, Scott, A. J. & Collinson, C.; Stratigraphic palaeontology, Termier, H. & G.

Bibliography.- Of the Conodonta, Ellison, S. P.

Taxonomy.—Classification of British Tubificidae, Brinkhurst, R. O.; Specific differentiation of Mediterranean Syllids, Cognette, G.; †Rhynchognathus Ethington preoccupied, Ethington, R. L. (2); Generic and subgeneric homonyms of Conodonts, Fay, R. O.; †Invalid generic names and junior synonyms of disjunct conodonts, Hass, W. H. (2); Systematic review of Ceratodrilus, Holt, P. C.; †Nomenclature of 3 Silurian genera, Howell, B. F. (3); †Taxonomy of fossil Vermes, Müller, A. H. (4); Systematic position of Parergodrilus, Reisinger, E. (3); †Streptognathus homeomorph of Taphrognathus, Rexroad, C. B. (3).

Technique: Methods.—Preservation of specimens of Pheretima, Ghosh, G. S. & Behura, B. K.; Method for histological preparation of Pectinaria gouldi, Hanks, J. E.; Culture of Tubifex eggs, Inase, M. (2); Rearing experiments on Urechis larvae, Sakiyama, F.; Method for collecting polychaetes, Tampi, P. R. S. (2); Laboratory culture of Indian earthworms, Tembe, V. B. & Dubashi, P. J.; †Magnetic separation of conodonts, Dow, V. E.; Method for extracting earthworms from pasture-soils, Zicsi, A. (1).

Obituary .- † Umberto Pierantoni, Salfi, M.

#### STRUCTURE

General.—†Structure of conodonts from the Ludlovian and Devonian, Gross, W. (1); †Morphology of the conodont genera Palmatolepis and Polygnathus, Gross, W. (2); Morphology of conodonts, Scott, A. J. & Collinson, C.; Conodont structure and variation, Tatge, U.

Caruncle.—In polychaetes, Rullier, F. (3)

Alimentary canal.—Structure of gizzard in Eisenia fostida, Gansen-Semal, P. van; Jaw-apparatus of annelids and scolecodonts, Sylvester, R. K.

Ligamentary and Muscular systems.—Ligamentary system in Nephthys, Clark, M. E. & Clark, R. B.; Clark, R. B. & Clark, M. E. (1); Ligamentary system and segmental musculature of Nephthys, Clark, R. B. & Clark, M. E. (2); Musculature in lumbricids, Pop, V. & Dragos, M.

Nervous system.—In polychaete larvae, Korn, H. (3); Neurosecretory cells in leeches, Legendre, R.

Reproductive system.—In Eisenia foetida, Herlant-Meewis, H.

Histology: Cytology.—Diploid and triploid forms of Lumbricillus lineatus, Christensen, B.; Chromosomes in Enchytracidae, Christensen, B. & Nielsen, C. O.; Histochemistry of ligaments in Nephthys, Clark, M. E. & Clark, R. B.; Lytic activity in relation to sperm entry in Hydroides, Colwin, A. L. & L. H.; Chromosomes and nuclear cytology of serpulids, Dasgupta, S. & Austin, A. P.; †Histology of the conodont genera Palmatolepis and Polygnathus, Gross, W. (2); Cytology of chloragogen cells in earthworms, Matsumoto, M.; Carylogia of the Lumbricidae, Omodeo, P.; Chromosomes in the genus Ophryotocha, Parenti, U. (1); Microstructure of the Neurodontiformes, Rhodes, F. H. T. & Wingard, P. S.; Ultrastructure of non-calciferous glands in Eismia foetida, Semal-Van Gansen, P., Vandermeersche, G. & Castiaux, P.; Neoblastin Spirobis pagenstecheri, Vannini, E. & Stagni, A.

Larva.—Larval structure of Echiurus abyssalis, Korn, H. (2); Larval types in Polychaeta, Uchida, T.

Anomaly: Variation.—Variation in distribution of eyes in Eppobdella octoculata, Dennewald-Pescatore, M.; Polymorphism in nereids, Durchon, M.; Biclitellate earthworm, Gates, G. E. (2); Double embryo in Tubifex hattai, Inase, M. (1); Morphological variation in Eppobdella octoculata, Jarry, D. (1); Allolobophora caliginosa with bifurcated tail, Karppinen, E.

#### **PHYSIOLOGY**

Constitution: Metabolism.—Accumulation of radioisotopes by leeches, Getsova, A. B. et al.; Chemistry of nereid toxin, Hashimoto, Y. & Okaichi, T.; Respiration in Enchytraeus albidus, Ivleva, I. V.; Lysozymes in Nephthys hombergi, Jolles, P. & Zuilli, S., Activity of haemoglobin in Arenicola, Krüger, F.; Oxygen-consumption in Hirudinaria granulosa, Madanmohanrao, G.; Iron in chloragogen cells of earthworms, Matsumoto, M.; Arginase activity in earthworm tissues, Needham, A. E.; Weight-variation in Lumbricus terrestris, Puytorac, P. de & Pinon, M.; Chemical constitution of the Neurodontiformes, Rhodes, F. H. T. & Wingard, P. S.; Electron microscopy of haemoglobin in Arenicola marina, Roche, J. et al. (1); Electron microscopy of haemoglobin and chlorocruorin in Annelids, Roche, J. et al. (2); Properties in giant-earthworm muscle-extracts, Rosenberg, H. et al.; Chloragosomes in Lumbricus, Urich, K.

Neurophysiology.—Habituation of Nereis to stimuli, Clark, R. B.; Effects of local anaesthetics on Hirudo medicinalis, Megemont, C. et al.; Burrowing of earthworms, Roots, B. I. & Phillips, R. R.; Movement in annelids, Wilson, D. M.; Effects of environment on annelid ganglia, Vereshchagin, S. M. & Sytinski, I. A.

Luminescence.—Light emission of polychaetes, Nicol, J. A. C.; Fluorescent pigments in Tomopteris septentrionalis, Terio, B.

Environmental effects.—Effect of temperature on dorsal blood-vessel in earthworm, Couroy, D. A.; Antimitotic effect of D<sub>2</sub>O on cell-division in polychaeteggs, Gross, P. R. & Spindel, W.; Influence of brackish water on Nersi succinea, Kiseleva, M. I. (2).

# REPRODUCTION AND DEVELOPMENT

Reproduction.—Spawning of Arenicola marina, Duncan, A.; Reproduction in Harmothoe imbricata, Mileikovskii, S. A.; Self-fertilization in Ophryotrocha labronica, Parenti, U. (2); Asexual reproduction in Tubificidae, Poddubnaja, T. C.; Reproduction in Parergodrilus, Reisinger, E. (3).

Parthenogenesis.—Obligatory parthenogenesis in Grubea pusilla, Hauenschild, C.

Sex.—Sex-variation in hermaphrodite polychaete, Bacci, G. & Bortesi, O.

Life-history .- Of Diopatra neapolitana, Choe, S.

Development.—Breeding of Hemiclepsis m. marginata, Baugh, S. C. (2); Brood-rearing by leeches, Deckart, M.; Development in Polydora ciliata, Hempel, C.; Larval development of Echiurus abyssalis, Korn, H. (1); Larval development in Harmothoe imbricata, Mileikovakki, S. A.; Coccons of Cystobranchus spp., Pawlowski, L. K. & Hoffmann, J.; Development of Salmacina dysteri, Rullier, F. (1); Development of Polydora redeki, Rullier, F. (4); Larval development of Polydora nuchalis, Woodwick, K. H.

Regeneration.—Regeneration in Nereis diversicolor, Clark, R. B. & Bonney, D. G.; Natural regeneration in Perionyx, Gates, G. E. (1); Effect of potassium on caudal regeneration of Nereis diversicolor, Stephan-Dubois, F. (1); Effect of magnesium chloride on posterior regeneration in Nereis diversicolor, Stephan-Dubois, F. (2); Regeneration of nerve-cords in lumbricids, Thermes, G.; Origin of nerve-cells in regeneration of Polydora, Thouveny, Y.

## **EVOLUTION AND GENETICS**

Evolution: Phylogeny.—Relationship of the cephalic region of polychaetes with the arthropods, Haffner, K. von; †Ordovician succession of condont faunas, Lindstom, M. (2); †Affinities of the Neurodontiformes, Rhodes, F. H. T. & Wingard, P. S.

Genetics.—Subspecific variation in Plutellus davisi, Macnab, J. A. & McKey-Fender, D.; Intraspecific variability in conodonts, Scott, A. J. & Collinson, C.

### **ETHOLOGY**

Ecology — Ecology of earthworms, Atlavinite, O. P.; Ecology of annelids on the Gann Flat, Pembrokeshire, Bassindale, R. & Clark, R. B.; Ecology of lumbricids in grasslands of Tiree Argyll, Boyd, J. M.; †Abundance and stratigraphic distribution of Devonian and Mississippian conodonts, Collinson, C. et al.; Ecology of polychaetes in Halarachnion zone of the Bay of Marseilles, Costa, S.; †Ecology of the Conodonta, Ellison, S. P.; Ecology of Sabellaria abvelata in Bay of Mont Saint-Michel, Jacquet, J.; Ecological note on annelids at Banyuls, Kerneis, A.; Effect of outfall water of power-station on annelids, Markowski, S.; Ecology of Branchiobdellid oligochaetes, McManus, L. R.; †Ecology of fossil Vermes, Müller, A. H. (4); †Cambrian conodont localities, Müller, K. J. (2), (3); Ecology and biology of polychaetes in Murman, Petrovskaya, M. V.; Ecological notes on land-leeches in Borneo, Smythies, B. E.; Ecology of Enchytraeids

in tundra-soils, Stebayev, I. V.; Ecology of earth-worms in Tully forest, New York, Stegman, LeR. C.; Ecological note on polychaetes in a salt-water lagoon, India, Tampl, P. R. S. (1); Zonation of Nerina cirratulus, Vader, W. J. M.; Annelids in deep-sea trenches, Wolff, T.; Ecology of Eophila antipai var. tuberculata, Zajonc, I. (1); Ecological notes on lumbricids in south-west Slovakia, Zajonc, I. (2).

Bionomics.—Macrobdella decora devouring eggs of spotted salamander, Cargo, D. G.; Disease attacking Cystobranchus in captivity, Hoffmann, J.; Oligochaetes in sand-layers of water-works, Husmann, S.; Predatory activities of Eteone longa, Khlebovich, V. V. (2); †Value of conodont stratigraphical boundaries, Müller, K. J. (4); Biological notes on freshwater oligochaetes, Peters, W.; Bionomic note on the giant earthworm of Australia, Pope, E. C.; Population-density of Nereis diversicolor in the Caspian Sea, Romanova, N. N.; Bionomics of Pranchellion plicobranchus, Raj, P. J. S.; Bionomics of Pectinaria koreni tubes, Reineck, H. E.; Use of Capitella capitata in toxicity tests of marine waters, Reish, D. J. & Barnard, J. L.; Effect of earthworms on soil-fertility, Satchell, J. E.; Earthworm populations in a productive pasture, Waters, R. A. S.; Settling behaviour of Spirorbis borealis larvae, Wisely, B.

Associations.—Behaviour of Podarke pugettensis as a commensal, Davenport, D. et al.; Association of Glossiphonia complanata and Erpobdella octoculata, Jarry, D. (4); Epizoic association between monilogastrid and megascolecid oligochaetes, Lukose, J.

## GEOGRAPHICAL DISTRIBUTION

Europe.—Annelids associating with Lithophyllum at Roscoff, Bénard, F.; Tubificids from Britain, Brink-hurst, R. O.; Oligochaetes new to Britain, Cain, A. J.; Distribution of Nephthys spp. in S.-W. Britain, Clark, R. B. & Haderlie, E. C.; Lumbricids in fauna of Bristol area, Davies, H.; Hirudo medicinalis in the Netherlands, Dresscher, T. G. N. & Engel, H. (1); Hirudinea in the Netherlands fauna, Dresscher, T. G. N. & Engel, H. (2); Polychaetes from the Black Sea, Dumitresco, H.; Aeolosoma viride in Piemonte, Ercolini, A.; Hirudinea in fauna of Friesland, Hartog, C. den & Tulp, A. S.; Lumbricids in osier-beds of Brabantse Biesnosch, Heyligers, P. C.; Oligochaeta from subterranean water, Germany, Hraba, S.; Pontobdella muricata on Roja batis, France, Jarry, D. (3); New Piscicola sp. from France. Jarry, D. (5); Occurrence of Hirudo medicinalis in Denmark, Jensen, B.; Oligochaetes from caves in French Jura, Juget, J.; Polychaete larvae in plankton of Black Sea, Kiselea, M. I.; New subspecies of Haplosyllis depressa from Banyula, Laubier, L. (1); Occurrence of Vermiliopsis richardi at Banyula, Laubier, L. (2); Polychaetes in fauna of Pre-Azov area, Lubyanov, I. P.; Leeches from the Amur Basin, Russia, Lukin, E. I.; Polychaetes from Bulgarian coast, Marinov, T. (1); Lumbricide from Mt. Pollino, Omodeo, P.; Annelids from the Apulian caves, **Ruffo**, S.; Occurrence of *Polydora redeki* at Roscoff, **Rullier**, F. (4); Lumbricids from East Malling Research Station, **Rutter**, A. E. H.; Pelagic polychaete larvae in White Sea, Sveshnikov, V. A.; Annelids in bottom-fauna of Airisto Sound, Finland, Tulkki, P.; Freshwater leeches from Scotland, Warwick, T. & Mann, K. H.; Lumbricid oligochaetes in fauna of southwest Slovakia, Zajone, I. (2); Earthworm fauna of the river-systems of Ostravica and Dol. Bečva, Zajonc, I. (3); Hungarian Lumbricidae, Zicsi, A. (2).

)]

rth-

C.;

erine

-sea var. bri-

of king igo-S.; V.

ies, ater ant

an-

bes,

L. ; E. ;

re,

s a

ry,

at

in,

in,

na

the

);

ick

te,

of

eta L.; D.

); en,

et,

m

sis

in

ies

ly-

m-

ist

d,

r-

in

h-

Asia.—Polychaetes from southern India, Banse, K.; Rhynchobdellids from India, Baugh, S. C. (1); Two new Rhynchobdellidae from India, Baugh, S. C. (2); Limnicolous oligochaetes from central Asia, Chekanovskaya, O. V.; Pelagic polychaetes from Malacca Straits and south China Sea, Dales, R. P.; Neanthes diversicolor from Caspian Sea, Hartman, O. (1); Polychaetes from the Karachi coast, Hasan, S. A.; New Nothia sp. from Japan, Imajima, M.; New Arenicola sp. from Bombay, Kewalramani, H. G. et al.; Two new polychaetes from the Seto-Inland-Sea, Kitamori, R. (1); Two new Pilargiid polychaetes from Japan, Kitamuri, R. (2); Glossiphonidae from Lake Baikal, Lukin, E. I. & Epshtein, V. M.; Ancisroyllis growlandica from India, Rullier, F. (2); Leeches from Afghanistan, Sciacchitano, I. (2); Hirudinea in fauna of Borneo, Smythies, B. E.; Cavernicolous oligochaetes in Japan, Torii, H.

Africa.—Errant polychaetes from South Africa, Day, J. H.; Sabellariid polychaetes from W. Africa, Fauvel, P.; Polychaetes from the Red Sea, Hartmann-Schröder, G.; Hirudo michaelseni from French Equatorial Africa, Jarry, D. (2); Terrestial oligochaetes from the Sahara, Kollmannsperger, F.; Hirudinea from the Congo, Schiacchitano, I. (1).

North America.—Polychaeta from the Pacific coast of N. America, Berkeley, E. & Berkeley, C. (1); Polychaetes from Minas Basin and Minas Channel, Bay of Fundy, Bousfield, E. L. & Leim, A. H.; Hirudinea on catfishes, Kansas, Harms, C. E.; Polychaetes from the deep basins of Southern California, Hartman, O. & Barnard, J. L.; New Ceralodrilus sp. from Idaho, Holt, P. C.; Earthworms from Whitewater Valley, Indiana, Joyne, J. W.; New Euchone sp. from California, Reish, D. J.; Polychaetes from Revilla Gigedo Is., Mexico, Rioja, E.

West Indies.—Lycastopsis hummelincki from Curação, Marcus, E. du B. R.; Polychaetes from the British West Indies, Marsden, J. R.

South America.—Two Arenicola spp. from Brazil, Nonato, E.; Hirudinea from Lake Titicaca, Ringuelet, R. A.

Australasia.—Ariciid polychaetes from Australia, Anderson, D. T.; Echiuroids from Australia, Edmonds, S. J.; Glycerid polychaetes from New Zealand, Knox, G. A.

Mediterranean.—Polychaetes from the Mediterranean, Bellan, G.; Occurrence of Diploirins glaucus in the Medierranean, Laubier, L. (3); Polychaetes from the Aegean Sea, Marinov, T. (2).

N. Atlantic Ocean.—Echiuroids from the Canary Islands, Mackie, G. O.

Pacific Ocean.—Pelagic polychaetes from northeast Pacific, Berekeley, E. & Berkeley, C. (2); Littoral polychaetes from the Kurile Is., Khlebovich, V. V. (1); Gephyrea from the N. Pacific, Marakov, V. V.; Distribution of Poeobius meseres in N. Pacific, McGowan, J. A.

Antarctica.—Polychaetes in fauna of the Ross Sea, Bullivant, J. S.

Geological.—†Permian annelids of the Kuznetz Basin, Andreeva, E. M. et al.; †British Cenozoic annelids, Anon. (2); †Cretaceous Terebella, Germany, Arnold, H.; †Lower Ordovician conodonts from El Gassi, Sahara, Bazoche, D.; †Worm-tracks in Oligo-

cene, Bavaria, Berger, W.; †Triassic conodonts from Alaska, Bergquist, H. R.; †Fucusopsis angulatus from the Danian-Palaeocene of Poland, Birkenmajer, K.; †Upper Devonian and Carboniferous conodonts from the Marburg hinterland, Bischoff, G.; †Devonian conodonts from Frankenwald, Bischoff, G. & Sannemann, D.; †Devonian conodonts, Germany, Bis-choff, G. & Stoppel, D.; †Conodonts of the middle and upper Devonian, Bischoff, G. & Ziegler, W.; Carboniferous Spirorbis from Belgium, Bouckaert, J.; †Triassic conodonts from Nevada and Utah, Clark, Triassic conodonts from Nevada and Utah, Clark, D. L.; †Conodonts in Devonian-Mississippian transition, Texas, Cloud, P. E. et al.; †Devonian and Mississippian conodonts in the upper Mississippia valley, Collinson, C. et al.; †Conodont fauna in Exshaw formation at Crowsnest Pass, Alberta, Copeland, M. J.; †Ditrupa sp. in Miocene, Czechoslovakia, Čtyroký, P.; †Palaeogeography of the London Clay Sea, Davis, A. G. & Elliott, G. F.; †Pervonian and Carboniferous conodont horizons in W. Devonian and Carboniferous conodont horizons in W. and S.W. England, Dineley, D. L. & Rhodes, F. H. T.; Annelson, England, Dinetey, D. L. & Rhodes, F. H. I.; Annelids in Lower Cretacous, Georgia, S.S.R., Eristavi, M. S.; †Ordovician conodonts from Iowa and Minnesota, Ethington, R. L. (1); Ordovician conodonts from Northern Manitoba, Ethington, R. L. & Furnish, W. M. (1); †Ordovician conodonts from Southern Manitoba, Ethington, R. L. & Furnish, W. M. (2); †Ordovician conodonts in New Jersey, Ethington, R. L. et al.; †Problematicum from the lower Lias, France, Gardet, G., Laugler, R. & Lessertisseur, J.; †Precambrian annelids from South Australia, Glaessner, M. F.; †Annelids in Precambrian of the Ediacaru Fossil Reserve, Australia Character of the Ediacaru Fossil Reserve of the Ediacar tralia, Glaessner, M. F. & Daily, B.; †Ordovician concodonts from the Maquoketa formation, Iowa, Glenister, A. T.; †Ludlovian and Devonian conconts, Gross, W. (1); †Marine Cretaceous fauna from a boring "Babekuhl I", Germany, Haller, W.; Upper Devonian conodonts from North America, Hass, W. H. (1); †Conodonts from the Carboniferous of Texas, Hass, W. H. (2); †Miocene sand pipes from Yamagata Pref., Japan, Hatai, J.; †Polygnathus and Palmatolepis in the Upper Devonian, Helms, J. (1); †Devonian conodonts from Thuringia, Helms, J. (2); †New Triassic conodonts, Austria and Pakistan, Huckriede, R.; †Faunal zonation of the Minnelusa formation, Black Hills, South Dakota, Jennings, T. V.; †Polychaetes in Mesozoic, Japan, Katto, J.; †Upper Devonian conodont fauna, Wyoming, Klapper, G.; †Silurian conodonts from Málaga, Spain, Kockel, F.; †New species of Rhizocarllium in Triassic, Julian Alps, Kühn, O.; †Conodonts in Ordovician Cherts, Scotland, Lamont, A. & Lindström, M.; †Annelida in Ludlovian Silurian, Britain, Lawson, J. D.; †Ordovician conodonts from S. central Sweden, Lindström, M. (1); †Devonian conodonts from Germany, Lutzens, H.; †Devonian and Carboniferous conodonts from Adrar-Tanezrouft, Sahara, Lys, M. & Serre, B.;

†Miocene and Pliocene megafossils of N. Alaska,

MacNeil, F. S.; Lower Carboniferous annelid mud tubes from the Kuznetsk Basin, U.S.S.R., Maksimova, S. V.; †Scolecodonta and Conodonta from Permian of Friedrich Heinrich 57 mine, Malzahn, E.; †Polychaete jaws from the Silurian of Gotland, Martinsson, A; † A new Triasse "helminthoid" from Thuringia, Müller, A. H. (1); † Isopodichnus from the Trias of Germany, Müller, A. H. (2); † New Planolites sp. in Carboniferous, Germany, Müller, A. H. (3); Conodonts in Upper Devonian, Iowa, Müller, K. J. (1); † Cambrian expendent from Function and Miller, K. J. (2); † New Planolites sp. in Carbonic specification from Function and Miller, K. J. (2); † New Planolites sp. in Carbonic specification from Function and Miller, K. J. (2); † New Planolites sp. in Carbonic specification from Function and Miller, M. J. (2); † New Planolites sp. in Carbonic specification from Function and Miller, M. J. (2); † New Planolites sp. in Carbonic specification from Function and Miller, M. (2); † New Planolites sp. in Carbonic specification from Function from Thuringia, Miller, M. (2); † New Planolites sp. in Carbonic specification from Thuringia, Miller, M. (2); † New Planolites sp. in Carbonic specification from the Trias of Sp. in Carbonic specificatio (1); †Cambrian conodonts from Europe and North America, Müller, K. J. (2), (3); †Upper Devonian

conodonts from Iowa, Müller, K. J. & Müller, E. M.; †Cretaceous annelida from Olinda, Pernambuco, †Cretaceous annelida from Olinda, Fernambuco, Oliveira, P. E.; †Devonian conodonts of the Spanish Sahara, Panseri, C. & Barsotti, G.; †2 new annelids from the Devonian of France, Pillet, J.; †Spirorbis pusillus in Upper Carboniferous, Czechoslovakia, Přibyl, A.; †Ordovician conodonts from Ohio, Kentucky and Indiana, Pulse, R. R. & Sweet, W. C.; †Carboniferous conodonts from S.W. Illinois, Rexroad, C. B. (1). †Carboniferous conodonts from Illinois Carbonierous conodonts from S.W. Illinois, Rexroad, C. B. (1); †Carboniferous conodonts from Illinois, Rexroad, C. B. (2); †Conodonts from the Glen Dean (Carboniferous) of Kentucky, Rexroad, C. B. & Clarke, C. E.; †Devonian condonts from S.W. England, Rhodes, F. H. T. & Dineley, D. L. (1); †Devonian conodonts from S.W. England, Rhodes, F. H. T. & Dineley, D. L. (2); †Lumbriconersis commensal with Clypeaster in the Helvetian of Syria, Saint-Seine, R. de.; †Carboniferous Planklites, and Gwo-Seine, R. de.; †Carboniferous Planklites, and Gwo-Seine, R. de; †Carboniferous Planolites and Gyro-chorte from Westphalia, Schleicher, L.; †Sphenothallus stubblefieldi from the Carboniferous of Belgium, Schmidt, W. & Teichmüller, M.; †Conodonts from greywacké systems in Harz, Schriel, W. & Stoppel, D.; †Devonian and Carboniferous conodonts from the Harz Mts., Schwan, W.; †Worm traces in shallow water deposits, Seilacher, A.; †Conodonta in the Devonian and Carboniferous of France and Belgium, Serre, B. & Lys, M.; †Miocene Annelida from Austria, Sieber, †Mississippian conodonts from N.E. Mississippi, Stanley, E. A.; †Upper Ordovician or Richmondian condonts from Wyoming, Stone, G. L. & Furnish, W. M.; †Annelids and scolecodonts from Middle Devonian of S.W. Ontario, Stumm, E. C. & Wright, J. D.; †Ordovician conodonts from Ohio and Kentucky, Sweet, W. et al.; †Upper Devonian and Lower Mississippian scolecodonts from central Missouri, Sylvester, R. K.; †Conodonts control of pellet formation in the basal Maquoketa of Iowa, Tasch, P.; †Triassic conodonts from Germany, Tatge, U.; †Lower Carboniferous conodonts of Tatge, U.; †Lower Carboniferous conodonts of the Fitzroy Basin, Thomas, G. A.; †Devonian-Carboniferous profile of Weilburg-Lahn region, Trautwein, H. & Wittekindt, H.; †Annelids from Carbon-Wurmrevier of Aachen, Vangerow, E. F.; New Carboniferous conodonts from Germany, Voges, Thew Carboniterous conodonts from Germany, Voges, A.; †Spirorbis in Miocene of Maryland, Vokes, H. E.; †Rhombocorniculum gen. nov., Cambrian, Shropshire, Walliser, O. H.; †Annelids and conodonts from Carboniferous of Illinois, Wanless, H. R.; †New Terebellid from the Mesozoic of New Zealand, Webby, B. D.; †Ophiomorpha quiriquinae from sandstone of Quiriquina shales, Wetzel, W.; †Middle Palaeozoic Vermes of Central and West Texas, Wilson, J. L. & Masiewarks, O. P.; †Devonina, and Carboniferous Majewske, O. P.; †Devonian and Carboniferous conodonts from S.W. Europe, Ziegler, W. (1); †New conodont from Oberscheld/Dillmulde Manticoceras beds, Ziegler, W. (2); †Conodonts from Lower Devonian, Germany, Ziegler, W. (3).

#### SYSTEMATIC INDEX

## ANNELIDA

## POLYCHAETA

Amage longibranchiala sp. nov., off S. California, p. 153 figs., Hartman, O. (2).

Ammotrypane pallida sp. nov., off S. California, p. 133 figs., Hartman, O. (2).

Amphiglena marita sp. nov. [sine descr.], Kurile Is., pp. 10, 11, Khlebovich, V. V. (1).

Ancistrosyllis hanaokai sp. nov., Japan, p. 1086 figs., Kitamori, R. (2); A. groelandica McInt., India, p. 236 figs., Rullier, F. (2).

Arenicola Lamarck, key to spp., p. 113, bombayensis sp. nov., Bombay, p. 109 figs., Kewalramani, H. G. et al.

Aricidea alisdairi sp. nov., Karachi coast, p. 108 figs., Hasan, S. A.

Augeneriella hummelincki Banse indica subsp. nov., India, p. 174 figs., Banse, K.

† Autodetus lindstroemi, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.

Brada glabra sp. nov., off S. California, p. 129 figs., Hartman, O. (2).

Ceratocephala loveni pacifica subsp. nov., off S. California, p. 94 figs., Hartman, O. (2).

Cirratulus branchioculatus sp. nov. [sine descr.], pp. 7, 11, Khlebovich, V. V. (1).—C. revillagigedoensis sp. nov., Revilla Gigedo Is., Pacific, p. 250 figs., Rioja, E.

†Cornulites intermedia, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.

Cossura coasta sp. nov., Japan, p. 1082 figs., Kitamori, R. (1).

† Dickinsonia Pre-Cambrian, South Australia, Glaessner, M. F.

Diopatra Aud. & M. Edw., diagnostic features of spp., p. 338, neapolitana Delle Chiaje, p. 341 figs., neapolitana var. capensis var. nov., p. 344 figs., monroi sp. nov., p. 345 figs., dubia sp. nov., p. 348 figs., S. Africa, Day, J. H.

†Ditrupa plana London Clay, p. 1, Anon. (2).—
—D. cornea, Miocene, Czechoslovakia, Čtyroký, P.;
†D. plana in London Clay, p. 255, Davis, A. G. & Elliott, G. F.; †D. cornea and transsilvanica, Tortonian, Austria, Sieber, R.

Dorvillea mandapamae sp. nov., India, p. 166 figs., Banse, K.—D. graciloides sp. nov., Red Sea, p. 117 figs., Hartmann-Schröder, G.

Drilognathus gen. nov., Lumbrinerinae, type: D. capensis sp. nov., in body-cavity of Onuphis holobranchiata, S. Africa, p. 370 figs., Day, J. H.

Drilonereis falcata Moore, p. 364 figs., monroi sp. nov., p. 365 figs., S. Africa, Day, J. H.

Epidiopatra gilchristi sp. nov., S. Africa, p. 352 figs., Day, J. H.

Eteonides gen. nov., Phyllodocidae, defined p. 72, type: E. servata sp. nov., Red Sea, p. 72 figs., Hartmann-Schröder, G.

Euchone limnicola sp. nov., southern California, p. 717 figs., Reish, D. J.

Eulalia (Hypoeulalia) bilineata (Johnst.), p. 300 figs., (Pterocirrus) macroceros Grube, p. 301 figs., (Sige) falsa sp. nov., p. 303 figs., S. Africa, Day, J. H.

Eunereis caeca sp. nov., off S. California, p. 93, Hartman, O. (2).

Euphrosine paucibranchiata sp. nov., off S. California, p. 84 figs., Hartman, O. (2).

Exogone ovalis, p. 106 figs., simplex, p. 107 figs., spp. nov., Red Sea, Hartmann-Schröder, G.

1

Is.,

gs.,

p.

nsis G.

gs.,

W.,

rio,

gs.,

ali-

io,

in-

p.,

y,

n,

3.,

D.

p.

5.,

p.

Glycera Sav. redefined p. 220, key to spp., p. 221, americana Leidy, p. 221 figs., tesselata Grube, p. 223 figs., lamelliformis McInt. p. 224, lamellipodia sp. nov., p. 225 figs., New Zealand, Knox, G. A.—G. benguellana Aug., S. Africa, p. 329 figs., Day, J. H.

Glycinde capensis sp. nov., p. 331 figs., kameruniana Aug., p. 332 figs., S. Africa, Day, J. H.

Goniadides gen. nov., Goniadidae, defined p. 116, type: G. aciculata sp. nov., Red Sea, p. 116 figs., Hartmann-Schröder, G.

Grubea nuchalata, p. 100 figs., gracilis, p. 101 figs., balani, p. 102 figs., spp. nov., Red Sea, Hartmann-Schröder, G.

†Hamulus cf. H. onyx tubes Cretaceous, Olinda Pernambuco, Oliveira, P. E.

Haplosyllis biselosa sp. nov., Red Sea, p. 85 figs., Hartmann-Schröder, G.—H. depressa Aug. chamaeleon subsp. nov. ectoparasitic on Muricea chamaeleon, Banyuls, p. 75 figs., Laubier, L. (1).

Harmothoe lunulata var. faweli var. nov., Corsica, p. 277 figs., Bellan, G.—H. gilchristi, p. 275 figs., agulhana, p. 277 figs., corralophila, p. 278 figs., spp. nov. S. Africa, Day, J. H.

Hemipodus Quatref. redefined, key to spp., p. 227, simplex (Grube), p. 227 figs., digitifera Knox, p. 229, ellesmerensis sp. nov., p. 229 figs., New Zealand, Knox, G. A.

Hesionides gohari sp. nov., Red Sea, p. 74 figs., Hart-mann-Schröder, G.

Ilyphagus ilyvestis sp. nov., off S. California, p. 130 figs., Hartman, O. (2).

†Josephella angulosella, J. kuhni kuhni, †J. k. simplicissima Tortonian, Austria, Sieber, R.

Lagisca pedroensis sp. nov., off S. California, p. 80 figs., Hartman, O. (2).

Lamellisyllis gen. nov., Syllidae, defined p. 319, type: L. comans sp. nov., False Bay, S. Africa, p. 319 figs., Day, J. H.

Learna casca sp. nov., off S. California, p. 161, Hartman, O. (2).

Leanira calcis sp. nov., off S. California, p. 82 figs., Hartman, O. (2).

Leiocapitellides gen. nov., Capitellidae, defined p. 119, type: L. analis sp. nov., Red Sea, p. 119 figs., Hartmann-Schröder, G.

Leiochrides hemipodus sp. nov., off S. California, p. 136, Hartman, O. (2).

Lepidasthenia brunnea sp. nov., S. Africa, p. 285 figs., Day, J. H.

Leptoecia antarctica Monro, S. Africa, p. 356 figs., Day, J. H.

Lumbriclymene lineus sp. nov., off S. California, p. 142 figs., Hartman, O. (2).

Lumbrineris albidentata Ehlers, p. 357 figs., heteropoda Marenzeller var. allantica var. nov., p. 360 figs., brevicirra (Schmarda), p. 361 figs., magalhaensis Kinberg, p. 362 figs., S. Africa, Day, J. H.—L. longensis sp. nov., off S. California, p. 103, Hartman, O. (2).

†Lumbriconereis (?) clypeastricola sp. nov., p. 581 figs., Helvetian, Syria, Saint-Seine, R. de.

Lycastopsis hummelincki Aug. from Curação, p. 58 figs., Marcus, E. du B. R.

Malmgrenia purpurea sp. nov., S. Africa, p. 281 figs., Day, J. H.

Mediomastus glabrus sp. nov., off California, p. 138, Hartman, O. (2).

Melinnexis moorei nom. nov. pro Melinna pacifica Moore, 1923, nec McInt., p. 159, Hartman, O. (2).

Micromaldane bispinosa sp. nov., Red Sea, p. 121 figs., Hartmann-Schröder, G.

Microspio kussakini sp. nov. [sine descr.], Kurile Is., pp. 7, 11, Khlebovich, V. V. (1).

Myriochele pygidialis sp. nov., off S. California, p. 149 figs., Hartman, O. (2).

Myriowenia gen. nov., Oweniidae, defined p. 151, type: M. californiensis sp. nov., off S. California, p. 151 figs., Hartman, O. (2).

Neoheteromastus gen. nov., Capitellidae, defined p. 137, type: N. lineus sp. nov., p. 138, Hartman, O. (2).

Nephthys sukumoensis sp. nov., Japan, p. 1083 figs., Kitamori, R. (1).

Nereis diversicolor Müll. transf. to Neanthes, p. 38, Caspian and Azov Seas, p. 35 figs., Hartman, O. (1).—
N. anoculis sp. nov., off S. California, p. 91 figs., Hartman, O. (2).—N. jacksoni reducta subsp. nov., p. 110 figs., sarsoensis sp. nov., p. 113 figs., ghardaque sp. nov., p. 114 figs., Red Sea, Hartmann-Schröder, G.—
N. virens Sars larvae, White Sea, p. 347 figs., Sveshnikov, V. A.

†Nereites tosaensis p. 324 figs., murotoensis p. 326 figs., spp. nov. Eocene, Japan, Katto, J.

Nerine oligobranchia sp. nov. [sine descr.], Kurile Is., pp. 7, 11, Khlebovich, V. V. (1).

Nothria shirikishinaiensis sp. nov., Japan, p. 55 figs., Imajina, M.

Notocirrus australis sp. nov., S. Africa, p. 367 figs., Day, J. H.

Notomastus precocis sp. nov., off S. California, p. 139, Hartman, O. (2).

Odontosyllis longicornis sp. nov., Red Sea, p. 98 figs., Hartmann-Schröder, G.

Opisthosyllis papillosa sp. nov., Red Sea, p. 87 figs., Hartmann-Schröder, G.

Oriopsis coalescens sp. nov., India, p. 172 figs., Banse, K.

Parapionosyllis brevicirra paucicirra subsp. nov., p. 91 figs., subterranea sp. nov., p. 92 figs., Red Sea, Hartmann-Schröder, G.

Parapterosyllis gen. nov., Syllidae, defined p. 90, type: P. sexoculata sp. nov., Red Sea, p. 90 figs., Hartmann-Schröder, G.

†Paulinites burgensis sp. nov., p. 3 figs., Ludlovian, Silurian, Burs, Gotland, Martinsson, A.

Pholoe minuta tecta Simpson, larvae, White Sea, p. 343 figs., Sveshnikov, V. A.

Phyllochaetopterus limicolus sp. nov., off S. California, p. 120 figs., Hartman, O. (2).

Phyllodoce (Anaitis) capensis sp. nov., S. Africa, p. 298 figs., Day, J. H.

Pilargis hamatus sp. nov., off S. California, p. 88 figs., Hartman, O. (2).—P. matsunagaensis sp. nov., Japan, p. 1088 figs., Kitamori, R. (2).

Pionosyllis confusa, p. 92 figs., oculata, p. 93 figs., spp. nov., Red Sea, Hartmann-Schröder, G.

Polydora perata sp. nov., [sine descr.], Kurile Is., pp. 7, 11, Khlebovich, V. V. (1).—P. (Boccardia) redeki Horst, morphol., Roscoff, p. 231 figs., Rullier, F. (4).

Polyophthalmus translucens sp. nov., off S. California, p. 135, Hartman, O. (2).

†Pomatoceros triqueter Tortonian, Austria, Sieber, R. Praxillella trifila sp. nov., off S. California, p. 146 figs., Hartman, O. (2).

Protomystides capensis sp. nov., S. Africa, p. 306 figs., Day, J. H.

†Protula extensa, Bracklesham beds, and Barton beds, p. 1, Anon. (2).—†P. canavarii Tortonian, Austria, Sieber, R.

Psammolyce articulata sp. nov., S. Africa, p. 293 figs., Day, J. H.

Pterosyllis formosa corallicola subsp. nov., Red Sea, p. 98 figs., Hartmann-Schröder, G.

Rhamphobrachium capense sp. nov., S. Africa, p. 355 figs., Day, J. H.

Rhynchospio arenicola asiatica subsp. nov., [sine descr.], Kurile Is., Khlebovich, V. V. (1).

†Rotularia bognoriensis, London Clay, p. 1, Anon, (2).
Sabellaria spinulosa var. ranjhi var. nov. Karachi coast, p. 110 figs., Hasan, S. A.

†Sclerostyla mellevillei Bracklesham and Barton beds, p. 1, Anon. (2).

Scoloples acmeeps profundus subsp. nov., off S. California, p. 108, Hartman, O. (2).—S. armiger (Müller), larvae, White Sea, p. 351 figs., Sveshnikov, V. A.

†Serpula gordialis, S. antiquata, S. articulata, Cretaceous, boring "Babekuhl I", Germany, Haller, W.—
†S. quinquenodosa, †S. sexta, Tortonian, Austria, Sieber, R.

†Serpulites longissimus in the Whiteliffe Beds, Ludlovian Silurian, Britain, Lawson, J. D.

†Serpulopsis insita Carboniferous, W. Illinois. Wanless, H. R.

Sigalion capense sp. nov., S. Africa, p. 29 figs., Day, J. H.

†Sinuocornu gen. nov., p. 487, proposed for Serpulites curtus Salter, 1848, Middle Silurian, Worcestershire, type-species now becomes Sinuocornu curtum (Salter), Howell, B. F.

Spermosyllis confusa sp. nov., Red Sea, p. 108 figs., Hartmann-Schröder, G.

Sphaerosyllis capensis serrata subsp. nov., p. 103 figs., xarifae, p. 103 figs., minima, p. 104 figs., brevicirra, p. 105 figs., spp. nov., Red Sea, Hartmann-Schröder, G.

Spio unidentata sp. nov. [sine descr.], Kurile Is., pp. 7, 11, Khlebovich, V. V. (1).

Spiophanes anoculata p. 118, pallidus p. 118 figs., spp. nov., off S. California, Hartman, O. (2).

†Spirorbis sp., Carboniferous, Belgium, Bouckaert, J.—†S. omphalodes, angulatus, arkonensis and spinuliferus, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.——†S. pusillis, Carboniferous, Wurmrevier of Aachen, p. 457 figs., Vangerow, E. F.—†S. calveriensis fig., Miocene, Maryland, Vokes, H. E.—†S. anthracosia, Carboniferous, W. Illinois, Wanless, H. R.

†Spriggina Pre-Cambrian, South Australia, Glaessner, M. F.

Sthenelais papillosa sp. nov., S. Africa, p. 289 figs., Day, J. H.

Streptosyllis reducta, p. 94 figs., cryptopalpa, p. 95 figs., spp. nov., Red Sea, Hartmann-Schröder, G.

Syllides papillosa sp. nov., Red Sea, p. 96 figs., Hartmann-Schröder, G.

Syllis (Haplosyllis) trifaleata sp. nov., p. 308 figs., cf. trapobanensis Willey, p. 309 figs., S. Africa, Day, J. H.—S. uschakovi and karilensis spp. nov. [sine descr.] Kurile Is., pp. 5, 11, Khlebovich, V. V. (1).

†Terebella lutensis Bather, Upper Cretaceous, Germany, p. 58, Arnold, H.

† Terebellina shikokuensis sp. nov., p. 328 figs., Eccene, Japan, Katto, J.

Tharyx tesselata, p. 126 figs., monilaris, p. 127 figs., spp. nov., off S. California, Hartman, O. (2).

† Titahia gen. nov., Terebellidae, p. 509, type: T. cornugata sp. nov., p. 509 figs., Lower Mesozoic, New Zealand, Webby, B. D.

† Tosalorbis gen. nov., Lycoridae, p. 326, type: T. hanzawai, p. 327 figs., Eocene, peculiaris, p. 328 figs., Oligocene, spp. nov., Japan, Katto, J.

Trypanosyllis ankyloseta sp. nov., S. Africa, p. 312 figa., Day, J. H.—T. wciniger sp. nov., Red Sea, p. 86 figs., Hartmann-Schröder, G.

Typosyllis heterocirra, p. 76 figs., dentata, p. 77 figs., striata, p. 78 figs., remanei, p. 79 figs., schulzi, p. 80 figs., lutea, p. 81 figs., gerlachi, p. 81 figs., cirromaculata, p. 82 figs., nuchalis, p. 83 figs., spp. nov., Red Sea, Hartmann-Schröder, G.

Uncopolynoz gen. nov., Polynoidae, defined p. 69, type: U. corallicola sp. nov., Red Sea, p. 70 figs., Hartmann-Schröder, G.

Vermiliopsis biformis sp. nov., off S. California, p. 164 figs., Hartman, O. (2).

#### OLIGOCHAETA

Aeolosoma viride Steph., Italy, p. 145 fig., Ercolini, A.—A. gineti sp. nov., French Jura, p. 391 fig., Juget, J.

Adenodrilus gen. nov., Phreoryctidae, type: A. denticulatus sp. nov., central Asia, p. 1156 figs., Chekanovskaya, O. V.

Aulodrilus pluriseta (Piguet), Britain, p. 194 fig., Cain, A. J.—A. pigueti Kowal. redescr., central Asia, p. 1154 figs., Chekanovskaya, O. V.

Ceratodrilus Hall, review, p. 53, orphiorhysis sp. nov., Idaho, p. 60 figs., Holt, P. C.

Dendrobaena pygmaea (Sav.), Britain, p. 196 figs., Cain, A. J.—D. pygmaea (Sav.) p. 96, octaedra var. filiformis Pop., p. 96 figs., venata (Rosa) f. typica, p. 98, Hungary, Zicsi, A. (2).

Dorydrilus tetrathecus sp. nov., Germany, p. 261 figs., Hraba, S.

Ilyodrilus bavaricus (Oschmann), Britain, p. 195 fig., Cain, A. J.

Phallodrilus aquaedulcis sp. nov., Germany, p. 248 figs., Hraba, S.

Plutellus davisi Macnab & McK.-Fender redescr. p. 127, blacki Macnab & McK.-F., a subsp. of davisi, p. 128, Macnab, J. A. & McKey-Fender, D.

Rhyacodrilus balmensis sp. nov., French Jura, p. 391 fig., Juget, J.

Trichodrilus Clap., key to spp., p. 270, medius p. 267 figs., tenuis, p. 271 figs., spp. nov., Germany, Hraba, S.

Tubificidae, British forms, p. 395 figs., Brinkhurst, R. O.

Uncinais uncinata (Örsted), Britain, p. 193 fig., Cain, A. J.

#### HIRUDINEA

Baicaloclepsis grubei Lukin & Epstein, p. 318 fig., echinulata (Grube), p. 319 fig., Lake Baical, Lukin, E. L. & Epstein, V. M.

Batracobdella hardingi sp. nov., India, p. 295 figs., Baugh, S. C. (1).—B. mahabiri sp. nov., India, p. 468 figs., Baugh, S. C. (2).

Branchellion plicobranchus Raj. redescr. from Carcharias sp. and Dasyatis warnak, Bay of Bengal, p. 152 figs., Raj. P. J. S.

Glossiphonia heteroclita (L.), India, p. 298 fig., Baugh, S. C. (1).

Helobdella titicacensis sp. nov., Lake Titicaca, p. 193 figs., Ringuelet, R. A.

Hemiclepsis bhatiai sp. nov., India, p. 291 figs., Baugh, S. C. (1).

Hirudo grisea sp. nov., Congo, p. 292 figs., Sciac-chitano, I. (1).

Linnatis ealensis Sciacchitano redescr., p. 295 figs., faini sp. nov., p. 300 figs., yokambensis sp. nov., p. 303 figs., Congo, Sciacchitano, I. (1).

Piscicola haranti sp. nov., France, p. 305 figs., Jarry, D. (5).

Placobdella horai sp. nov., India, p. 287 figs., Baugh, S. C. (1).—P. indica sp. nov., India, p. 472 figs., Baugh, S. C. (2).

Torix (?) baicalensis Stschegolew, Lake Baical, p. 319 fig., Lukin, E. L. & Epshtein, V. M.

## GEPHYREA

Anelassorhynchus porcellus Fisher, Queensland, p. 91 fig., adelaidensis sp. nov., S. Australia, p. 92 fig., Edmonds, S. J.

Arhynchite hiscocki sp. nov., Queenland, p. 90 fig., Edmonds, S. J.

Ochetostoma australiense sp. nov., Queenland, and N.S.W., p. 93 fig., Edmonds, S. J.

Phascolosoma wagini sp. nov., Far Eastern U.S.S.R., p. 242, Marakov, V. V.

Prometor poculum sp. nov., off S. California, p. 77 figs., Hartman, O. (2).

Pseudobonellia biuterina Johnst. & Tiegs, Australia, p. 96 fig., Edmonds, S. J.

Thalassema sydniense sp. nov., N.S.W., p. 89 figs., Edmonds, S. J.

#### CONODONTA

†Acodus inornatus sp. nov., p. 268 fig., Ordovician, Iowa, Ethington, R. L. (1).

† Acontiodus falcatus sp. nov., p. 268 figs., Ordovician, Iowa, Ethington, R. L. (1).

†Amorphognathus adunca, p. 723 figs., tridigitata, p. 724 fig., spp. nov. Ordovician, Iowa, Glenister, A. T.

†Ancyrodelloides gen. nov., p. 91, type: A. trigonica, p. 92 figs.; kutscheri, p. 93 figs., spp. nov. Shübelebene, Devonian, Bischoff, G. & Sannemann, D.

†Ancyrognathus alta, p. 1094 figs., A. aff. A. alta, p. 1095 fig., amana, p. 1095 figs., spp. nov. Devonian, Iowa, Müller, K. J. & E. M.

†Ancyrolepis gen. nov., p. 77, type: A. cruciformis sp. nov., p. 78 figs., Oberscheld/Dillmulde, Manticoceras beds, Devonian, Ziegler, W. (2).

†Ancyropenta gen. nov., p. 1092, type: "A [Ancyro-gnathus] curvata (Branson & Mehl 1934); longidenticulata sp. nov., p. 1093 figs., Devonian, Iowa, Müller, K. J. & E. M.

†Angulodus bockae, p. 129 figs., prioniodellides, p. 130 fig., spp. nov., Trias, Germany, Tatge, U.

† Apatognathus longidentatus sp. nov., p. 130 figs., Trias, Germany, Tatge, U.

†Aphelognathus irregularis sp. nov., p. 249 figs., Ordovician, Ohio, Kentucky and Indiana, Pulse, R. R. & Sweet, W. C.

†Bactrognathus communis, p. 380 figs., penehamata, p. 381 figs., spp. nov., Carboniferous, Texas, Hass, W. H. (2).

†Belodina gen. nov., p. 271, type: B [Belodus] grandis (Stauffer, 1935) fig., Ordovician, Iowa, Ethington, R. L. (1).—†B. leithi sp. nov., p. 269 fig., Ordovician, Manitoba, Ethington, R. L. & Furnish, W. M.—†B. erectus sp. nov., p. 359 fig., Devonian, South Devon, Rhodes, F. H. T. & Dineley, D. L. (1).—†B. dartoni, p. 220 fig., kirki, p. 221 figs., spp. nov. Ordovician, Wyoming, Stone, G. L. & Furnish, W. M.

†Belodus dispansus sp. nov., p. 729 figs., Ordovician, Iowa, Glenister, A. T.

†Branmehla gen. nov., Coleodontinae, p. 381, type: B. [Spathodus] inornatus, Carboniferous, Texas, Hass, W. H. (2).

†Bryantodus alternatus, p. 45 figs., angustus, p. 46 fig., biculminatus, p. 47 figs., grandis, p. 48 figs., paeckelmanni, p. 50 figs., spp. nov., Devonian, Germany, Bischoff, G. & Ziegler, W.

†Cavusgnathus characta, p. 15 figs., convexa, p. 17 figs., spp. nov., Carboniferous, Illinois, Rexroad, C. B. (1).

†Cladognathus gen. nov. (affinities with Ligonodina and Hindeodella) p. 28, type: C. prima, p. 28 figs., mehli, p. 29 figs., spp. nov., Carboniferous, Illinois, Rexroad, C. B. (1).—†C. Rexroad a syn. of Kladognathus, Fay, R. O.

†Coelocerodontus gen. nov., p. 273, type: C. trigonius, sp. nov., p. 273 fig., tetragonius, p. 273, sp. nov., fig., Ordovician, Iowa, Ethington, R. L. (1).

†Conchicolites Nicholson revised, type: C. gregarius Nich., Ordovician, C. devoniensis, sp. nov., p. 843 pls. figs., Angers, Devonian, Pillet, J.

†Cordylodus excavatus sp. nov., p. 1045 fig., Ordovician, Ohio and Kentucky, Sweet, W. C. et al.; †C. robustus sp. nov., p. 543 fig., Ordovician, Manitoba, Ethington, R. L. & Furnish, W. M.—†C. oklahomensis, p. 447 figs., Arbuckle Mts., Oklahoma, C. proavus, p. 448 figs., Arbuckle Mts., Oklahoma, spp. nov., Cambrian, Müller, K. J. (2).

†Cornulitella Howell, revised, type: Ortonia conica Nicholson, Ordovician, Ohio, Pillet, J.

fig (2 D

1

P.C

†Cornulites Schlotheim, revision, type: C. serpularius Schloth., Silurian, Gottland, C.? andegavensis sp. nov., p. 843 pl. figs., Angers, Devonian, Pillet, J.

†Ctenognathodus gen. nov. pro Ctenognathus Pander, 1956, nec Fairmaire, 1843, Fay, R. O.

†Clenopolygnathus gen. nov., p. 1084, type: C. [Polygnathus] angustidisca (Youngquist 1945), Devonian, Iowa, Müller, K. J. & E. M.

†Cyrtoniodus sinclairi sp. nov., p. 270 fig., Ordovician, Manitoba, Ethington, R. L. & Furnish, W. M.

†Distacodus procerus sp. nov., p. 275 fig., Ordovician, Iowa, Ethington, R. L. (1).—†D. palmeri, p. 449 figs., Nevada, D. (?) cambricus, p. 450 figs., Sweden, spp. nov., Cambrian, Müller, K. J. (2).

†Dollymae gen. nov., Idiognathodontidae, p. 394, type: D. sagittula sp. nov., p. 394 figs., Carboniferous, Texas, Hass, W. H. (2).—†D. hassi sp. nov., p. 275 fig., Carboniferous, Germany, Voges, A.

†Drepanodus homocurvatus, Iowa, basal Maquoketa, p. 187, Tasch, P.

†Eobelodina gen. nov., type: E. [Oistodus] fornicalus (Stauffer, 1935), Ordovician, Ohio and Kentucky, p. 1050, Sweet, W. C. et al.

†Eoligonodina magna sp. nov. p. 277 figs., Ordovician, Iowa, Ethington, R. L. (1).—†E. fairmountensis sp. nov., p. 253 fig., Ordovician, Kentucky, Pulse, R. R. & Sweet, W. C.—†E. ulrichi sp. nov., p. 222 figs., Ordovician, Wyoming, Stone, G. L. & Furnish, W. M.

†Furnishina gen. nov., p. 451, type: F. furnishi sp. nov., p. 452 figs., Wyoming, F. asymmetrica, p. 451 figs., Beggerow b. Demmin, F. bicarinata, p. 452 figs., Wyoming, F. primitiva, p. 453 figs., Mark Brandenburg, F. quadrata, p. 453 figs., Berlin-Spandau-West, spp. nov., Cambrian, Müller, K. J. (2).

†Furnishius gen. nov., p. 310, type: F. triserratus sp. nov., p. 310 figs., Lower Triassic, Nevada, Clark, D. L.

†Geniculatus glottoides sp. nov., p. 279 figs., Carboniferous, Germany, Voges, A.

†Gnathodus bilineatus semiglaber, p. 22 figs., commutatus nodosus p. 23 figs., c. punctatus, p. 24 figs., subspp. nov., kockeli sp. nov., p. 25 figs., Carboniferous, Germany, Bischoff, G.—†G. modocensis sp. nov., p. 30 figs., Caroniferous, Illinois, Rexroad, C. B. (1).

†Gondolella nevadensis, p. 308 figs., carinata, p. 308 figs., planata, p. 309 figs., spp. nov., Triassic, Nevada, Clark, D. L.—†G. navicula sp. nov., p. 147 figs., Trias, Austria, Huckriede, R.—†G. haslachensis, p. 131 figs., mombergensis, p. 132 figs., spp. nov., Trias, Germany, Tatge, U.—†G. curvata and G. merrilli common in the Carboniferous, W. Illinois, Wanless, H. R.

†Goniodontus gen. nov., p. 278, type: G. superbus sp. nov., p. 278 figs., Ordovician, Iowa, Ethington, R. L. (1).

†Hertzina gen. nov., p. 453, type: H. americana sp. nov., p. 455 figs., Nevada, H. elongata, p. 455 figs., Pommern, H.? bisulcata, p. 456 figs., Sweden, spp. nov., Cambrian, Müller, K. J. (2).

†Hibbardella milleri, p. 18 figs., ortha, p. 18 figs., spp. nov., Carboniferous, Illinois, Rexroad, C. B. (2).

†Hindeodella ibergensis, p. 28 figs., segaformis, p. 28 figs., spp. nov., Carboniferous, Germany, Bischoff, G.—†H. adunca sp. nov., p. 57 figs., Devonian, Germany, Bischoff, G. & Ziegler, W.—†H. mulleri sp. nov., p.

310 figs., Lower Triassic, Nevada, Clark, D. L.— †H. fragilis, sp. nov., p. 383 figs., Carboniferous, Texas, Hass, W. H. (2).—†H. multihamata p. 148 figs., petraeviridis, p. 149 figs., spp. nov., Austria, Trias, Huckriede, R.—†H. pachymandala, p. 466 fig., H. redunca, p. 466 figs., spp. nov., Mississippian, Stanley, E. A.

†Hindeodellinae subfam. nov., Coleodontidae, pp. 378, 383, includes Hindeodella, Cervicornoides, Kladognathus, Tripodellus, Metaprioniodus, Hass, W. H. (2).

†Hindeodina gen. nov., Coleodontinae, p. 382, type: simplaria, p. 382 figs., uncata, p. 383 fig., spp. nov., Carboniferous, Texas, Hass, W. H. (2).

†Icrodidae fam. nov., p. 1105, Lower-Upper Devonian, Müller, K. J. & E. M.

†Icriodus pesavis sp. nov., p. 96 figs., Schübelebene Devonian, Bischoff, G. & Sannemann, O.—†I. obliquimarginatus sp. nov., p. 62 fig., Devonian, Germany, Bischoff, G. & Ziegler, W.—†I. darbyensis, p. 1086 figs., mehli, p. 1086 figs., spp. nov., Devonian, Wyoming, Klapper, G.—†I. woschmidti, sp. nov., p, 185 fig., Devonian, Germany, Ziegler, W. (3).

†Keislognathus simplex sp. nov., p. 280 figs., Ordovician, Iowa, Ethington, R. L. (1).

†Kladognathus gen. nov. pro Cladognathus Rexroad, 1957, nec Burmeister, 1847, Fay, R. O.—†K. nom. nov. pro Cladognathus Rexroad, 1957, non Burmeister, 1947, type: K. prima, Carboniferous, Illinois, p. 10, Rexroad, C. B. (2).

†Kolihaia Prantl revised, type: K. eremila Prantl, 1944, Wenlockian, Bohemia, Pillet, J.

†Lambdagnathus gen. nov., Prioniodontidae, p. 19, type: L. fragilidens sp. nov., p. 20 figs., Carboniferous Illinois, Rexroad, C. B. (2).

†Lepodus Branson & Mehl, 1933, nec Rafinesque, 1810, a syn. of Lepognathus Mehl, 1958, Fay, R. O.

†Ligonodina hamata, p. 32 figs., obunca, p. 32 figs., spp. nov., Carboniferous, Illinois, Rexroad, C. B. (1).

†Ligonodininae subfam. nov., Coelodontidae, pp. 378, 384, includes Ligonodina, Euprioniodina, Synprioniodina, Hindeodelloides, Loxognathus, Hass, W. H. (2).

†Lonchodina (?) recurvata sp. nov., p. 34 figs., Carboniferous, Germany, Bischoff, G.—†L. monodentata, p. 68 figs., ramulata, p. 69 figs., richteri, p. 70 figs., spp. nov., Devonian, Germany, Bischoff, G. & Ziegler, W.—†L. spengleri, p. 152 figs., venusta, p. 152 fig., "n. sp. A", p. 153 figs., spp. nov., Trias, Austria, Huckriede, R.—†L. furnishi, p. 22 figs., paraclaviger, p. 22 figs., spp. nov., Carboniferous, Illinois, Rexroad, C. B. (2).—†L. epilonca sp. nov., p. 469 fig., Mississippian, Stanley, E. A.—†L. mulleri, p. 133 figs., suevica, p. 134 fig., spp. nov., Trias, Germany, Tatge, U.—†L. walliseri, p. 188 fig., cristagalli, p. 189 fig., spp. nov., Devonian, Germany, Ziegler, W. (3).

†Loxognathus grandis, sp. nov., p. 281 fig., Ordovician, Iowa, Ethington, R. L. (1).

† Mestognathus gen. nov., p. 36, type: M. beckmanni sp. nov., p. 37 figs., Carboniferous, Germany, Bischoff, G.

†Metalonchodina? dinodoides, p. 135 figs., mediocris, p. 136 fig., digitiformis, p. 136 fig., triquetra, p. 137 fig., spp. nov., Trias, Germany, Tatge, U.

† Microcoelodus sweeti sp. nov., p. 224 fig., Ordovician, Wyoming, Stone, G. L. & Furnish, W. M.

†Neoprioniodontinae subfam. nov., Coleodontidae, pp. 378, 383, includes Neoprioniodus, Leptochirognathus, Loxodus, Pachysemia, Subprioniodus, Hass, W. H. (2).

†Neoprioniodus insolitus, p. 383 figs., lanceolatus, p. 384 figs, spp. nov., Carboniferous, Texas, Hass, W. H. (2).—†N. postinversus sp. nov., p. 644 figs., Upper Devonian, Germany, Helms, J. (2).—†N. alytus sp. nov., p. 471 fig., Mississippian, Stanley, E. A.—†N. camurus, p. 33 figs., epemoebus, p. 34 figs., eractus, p. 34 figs., loxus, p. 34 figs., striatus, p. 35 figs., tenuis, p. 35 figs., spp. nov., Carboniferous, Illinois, Rexroad, C. B. (1).

†Neurodontiformes may represent primitive vertebrates related to the "jaw-like" Ordovician fossil Archeognathus, not conodonts as originally suggested, Rhodes, F. H. T. & Wingard, P. S.

†Nothognathella (?) falcata, p. 645 figs., ziegleri, p. 645 figs., spp. nov., Upper Devonian, Germany, Helms, J. (2).

† Oligodus Cooper, 1939, preoccupied Rafinesque, 1815, latter considered a nomen nudum so Oligodus Cooper, 1939, remains valid, Fay, R. O.

†Oneotodus gallatini sp. nov., p. 457 figs., Wyoming, O. n. sp. ? aff. gallatini, p. 457 figs., O. tenuis sp. nov., p. 457 figs., S. Dakota, Cambrian, Müller, K. J. (2).—†O. (?) beckmanni sp. nov., p. 98 figs., Schübelebene Devonian, Bischoff, G. & Sannemann, D.

†Oulodus rohneri sp. nov., p. 544 figs., Ordovician, N. Manitoba, Ethington, R. L. & Furnish, W. M.—
†O. casteri sp. nov., p. 255 figs., Ordovician, Ohio, Pulse, R. R. & Sweet, W. C.

†Ozarkodina ballai, p. 74 figs., lata, p. 76 figs., kutscheri, p. 79 figs., toxata, p. 80 figs., spp. nov. Devonian, Germany, Bischoff, G. & Ziegler, W.—†O. inclinata sp. nov., p. 735 figs., Ordovician, Iowa, Glenister, A. T.—†O. homoarcuala nom. nov. pro Subbryantodus arcuatus Branson & Mehl, non Ozarkodina arcuata B. & M., p. 646, lacera sp. nov., p. 647 figs., Upper Devonian, Germany, Helms, J. (2).—†O. saginata, sp. nov., p. 153 figs., Trias, Austria, Huckriede, R.—†O. compressa, p. 36 figs., recta, p. 36 figs., bella, p. 37 figs., spp. nov. Carboniferous, Illinois, Rexroad, C. B. (1).—†O. curvata sp. nov., p. 24 figs., Carboniferous, Illinois, Rexroad, G. B. (2).—†O. willsi, sp. nov., p. 364 figs., Devonian, South Devon, Rhodes, F. H. T. & Dineley, D. L. (1).—†O. deflecta, p. 472 figs., pachyamba, p. 473 figs., spp. nov., Mississippi, Stanley, E. A.—†O. kockeli, p. 137 figs., tortilis, p. 138 figs., breviramulis, p. 139 figs., spp. nov., Trias, Germany, Tatge, U.

†Palmatoleģis, morphology and histology, p. 40 figs., Gross, W. (1).—†P. (Manticoleģis) amana, p. 1101 fig., (M.) hassi, p. 1102 figs., spp. nov., Devonian, Iowa, Müller, K. J. & E. M.—†P. glabra, intraspecific variability, Scott, A. J. & Collinson, C.

†Paltodus feulneri sp. nov., p. 728 fig., Ordovician, Iowa, Glenister, A. T.

†Panderodus gen. nov., p. 284, type: P. [Paltodus] unicostatus (Branson & Mehl, 1933), Ordovician, Iowa, Ethington, R. L. (1).

†Pandorinellina nom. nov. pro Pandorina Stauffer, 1940, nec Bory de St. Vincent, 1827, Scacchi, 1833, type: P. [Pandorina] insita (Stauffer 1940) p. 378, Hass, W. H. (2).

†Parachirognathus gen. nov., p. 311, type: P. ethingtoni sp. nov., p. 311 figs., geiseri sp. nov., p. 312 figs., Lower Triassic, Nevada, Clark, D. L. †Pelekysgnathus (?) primitiva sp. nov., p. 83 figs., Devonian, Germany, Bischoff, G. & Ziegler, W.

†Plectrospathodus robustus sp. nov., p. 101 figs., Schübelebene Devonian, Bischoff, G. & Sannemann, D.

†Plegagnathus gen. nov., p. 544, type: P. nelsoni sp. nov., p. 544 figs., Ordovician, Manitoba, Ethington, R. L. & Furnish, W. M.

†Polygnathaceae superfam. nov., p. 1083, for Polygnathidae, Gnathodontidae and Icriodidae fam. nov. q.v., Müller, K. J. & E. M.

†Polygnathus, morphology and histology, p. 40 figs., Gross, W. (2).—†P. angustipennata, p. 85 figs., beckmanni, p. 86 fig., dengleri, p. 87 figs., spp. nov., dubia asymmetrica subsp. nov., p. 88 figs., spp. nov., dubia asymmetrica subsp. nov., p. 88 figs., spp. nov., bekeliana, p. 91 figs., robusticostata, p. 95 figs., trigonica, p. 97 figs., variabilis, p. 99 figs., spp. nov., p. evonian, Germany, Bischoff, G. & Ziegler, W.—†P. communis bifurcata, p. 390 figs., communis carina, p. 391 figs., vars. nov., carboniferous, Texas, Hass, W. H. (2).—†P. diversa sp. nov., p. 650 figs., Upper Devonian, Germany, Helms, J. (2).—†P. abneptis, p. 156 figs., tethydis, p. 157 figs., spp. nov., Trias, Austria, Huckriede, R.—†P. wyomingensis sp. nov., p. 1090 figs., Devonian, Wyoming, Klapper, G.—†P. amana, p. 1085 fig., independensis, p. 1088 figs., willer, K. J. & E. M.—P. pura sp. nov., p. 291 figs., p. pura, p. 291 figs., p. subplana, p. 292 figs., subspp. nov., L. Carboniferous, Germany, Voges, A.

†Prioniodella pectiniformis sp. nov., p. 158 figs., Trias, Austria, Huckriede, R.—†P. ctenoides, p. 139 fig., decrescens, p. 140 fig., spp. nov., Trias, Germany, Tatge, U.

†Prioniodina lata sp. nov., p. 47 figs., Carboniferous, Germany, Bischoff, G.—†P. schneideri sp. nov., p. 107 figs., Germany, Devonian, Bischoff, G. & Ziegler, W.—†P. montellensis sp. nov., p. 309 fig., Lower Triassic, Nevada, Clark, D. L.—†P. kochi sp. nov., p. 159 figs., Trias, Austria, Huckriede, R.—†P. velicuspis sp. nov., p. 259 figs., Ordovician, Kentucky, Pulse, R. R. & Sweet, W. C.—†P. rotunda sp. nov., Ordovician, Ohio and Kentucky, p. 1061 figs., Sweet, W. C. et al.—†P. latidentala, p. 140 figs., insignis, p. 141 figs., spp. nov., Trias, Germany, Tatge, U.

†Prionognathodus gen. nov. pro Prionognathus Pander, 1856, nec Ferté-Sénèctere, 1851, Fay, R. O.

†Pristognathus gen. nov., p. 226, type: P. bighornesis sp. nov., p. 226 figs., Ordovician, Wyoming, Stone, G. L. & Furnish, W. M.

†Proacodus gen. nov., p. 458, type: P. obliquus sp. nov., p. 458 figs., Mark Brandenburg, Cambrian, Müller, K. J. (2).

†Problematoconites gen. nov., p. 470, type: P. perforata sp. nov., p. 470 fig., Rügen, Cambrian, Müller, K. J. (2).

†Pseudopolygnathus lanceolata sp. nov., p. 391 figs., Carboniferous, Texas, Hass, W. H. (2).—†P. triangula sp. nov., p. 301 fig., t. triangula, p. 304 fig., t. inequalit, p. 302 fig., t. pinnata, p. 302 figs., subspp. nov., L. Carboniferous, Germany, Voges, A.

†Pygodus gen. nov., p. 67, type: P. anserinus sp. nov., p. 67 figs., Ordovician, Sweden, Lamont, A. & Lindström, M.

†Rhynchognathodus nom. nov. pro Rhynchognathus Ethington, 1959, nec Jackel, 1929, Ethington, R. L. (2).

O

an

R B

A

†Rhynchognathus gen. nov., p. 286, type: R. typica sp. nov., p. 286 figs., aborodentata sp. nov., p. 286 figs., Ordovician, Iowa, Ethington, R. L. (1).

†Roundya triangularis, p. 111 figs., wildungenensis, p. 112 figs., spp. nov., Devonian, Germany, Bischoff, G. & Ziegler, W.—†R. plana, p. 654 fig., praa, p. 655 fig., spp. nov., Upper Devonian, Germany, Helms, J. (2).—†R. iautissima sp. nov., p. 160 figs., Austria, "n. sp. A", p. 161 fig., Pakistan, Trias, Huckriede, R.—†R. castata sp. nov., p. 26 figs., Carboniferous, Illinois, Rexroad, C. B. (2).—†R. bidentata, p. 142 fig., meissneri, p. 143 figs., spp. nov., Trias, Germany, Tatge, U.

†Sagittodontus dentatus, p. 287 sp. nov., fig., Ordovician, Iowa, Ethington, R. L. (1).—†S. dahlmani, p. 460 figs., Oland, S. dunderbergiae, p. 461 figs., Nevada, S. eureka, p. 461 figs., Nevada, spp. nov. Cambrian, Müller, K. J. (2).

†Scandodus oelandicus, p. 463 figs., Öland, S. rarus, p. 463 figs., Oderberg, S. tortilis, p. 464 figs., Berlin-Spandau-West, spp. nov., Cambrian, Müller, K. J.

†Scolopodus devonicus sp. nov., p. 103 fig., Schübelebene, Devonian, Bischoff, G. & Sannemann, O.

†Scutula (?) thuringa, p. 656 figs., tripodis, p. 657 figs., spp. nov., Upper Devonian, Germany, Helms, J. (2).

†Siphonodella cooperi, p. 392 figs., obsoleta, p. 392 figs., spp. nov., Carboniferous, Texas, Hass, W. H. (2).

†Spathognathodontinae subfam. nov., Prionio-dontidae, pp. 378, 386, includes Spathognathodus, Centrognathodus, Pinacognathus, Aphelognathus, Bryantodina, Dinodus, Elictognathus, Nodognathus, Oligodus, Falcodus, Pandorinellina (q.v.), Lambdagnathus, Hass, W. H. (2).

†Spathognathodus Branson & Mchl, 1941, a syn. of Ctenognathodus (Ctenognathodus), Fay, R. O.—†S. spinulicostatus ultimus, subsp. nov., p. 57 figs., Carboniferous, Germany, Bischoff, G.—†S. asymmetricus, p. 104 figs., frankenwaldensis, p. 105 figs., transitans, p. 107 pl. figs., vurmi, p. 108 figs., spp. nov., Schübelebene, Devonian, Bischoff, G. & Sannemann, D.—†S. bidentatus, p. 114 figs., bipennatus, p. 115 figs., brevis, p. 116 figs., planus, p. 117 figs., sannemanni, p. 117 figs., spp. nov., Devonian, Germany, Bischoff, G. & Ziegler, W.—†S. cooperi, p. 387 figs., longus, p. 388 figs., spp. nov., Carboniferous, Texas, Hass, W. H. (2).—†S. bohlenanus sp. nov., p. 658 figs., Upper Devonian, Germany, Helms, J. (2).—†S. cristagalli, p. 161 figs., Pakistan, isarcica, p. 162 figs., "n. sp. A", p. 163 figs., South Tyrol, Austria, spp. nov., Trias, Huckriede, R.—†S. campbelli sp. nov., p. 37 figs., Carboniferous, Illinois, Rexroad, C. B. (1).—†S. remscheidensis sp. nov., p. 194 figs., Devonian, Germany, Ziegler, W. (3).

†Staurognathus anchoraria sp. nov., p. 393 figs., Carboniferous, Texas, Hass, W. H. (2).

†Subbryantodus stipans sp. nov., p. 39 fig., Carboniferous, Illinois, Rexroad, C. B. (1).

†Tetraprioniodus parvus sp. nov., p. 288 fig., Ordovician, Iowa, Ethington, R. L. (1).

†Trichonodella insolita, p. 289 fig., exacta, p. 290 figs., spp. nov., Iowa, Ethington, R. L. (1).—†T. angulata, p. 1064 figs., T. subundulata, p. 1065 figs., spp. nov., Ordovician, Sweet, W. C. et al.—†T. fragilis, p. 40 figs., imperfecta, p. 41 figs., spp. nov., Carboniferous, Illinois, Rexroad, C. B. (1).

† Tripodellus robustus sp. nov., p. 58 fig., Carboniferous, Germany, Bischoff, G.—† T. tenuis sp. nov., p. 659 figs., Upper Devonian, Germany, Helms, J. (2).

† Valentia Smith, 1907, nec Stal, 1865, a syn. of Scotlandia Cossman, 1909, Fay, R. O.

† Westergaardodina gen. nov., p. 465, type: W. bicuspidala sp. nov., p. 468 figs., Mark Brandenburg, W. amblicava, p. 467 figs., Sweden, W. bohlini, p. 469 figs., Sweden, W. mössebergensis, p. 470 figs., Sweden, W. tricuspidala, p. 470 figs., Oland, spp. nov., Cambrian, Müller, K. J. (2).

†Zygognathus maysvillensis, sp. nov., p. 262 figs., Ordovician, Kentucky, Pulse, R. R. & Sweet, W. C.

#### SCOLECODONTA

† Arabellites ausablensis, A. comis, A. cultriformis, A. cushingi, A. politus, A. productus, A. similis, A. spinosus, A. falciformis, A. hamiltonensis, A. jubatus, A. magnisulcatus, A. milleri, A. oblatus, A. prosseri, A. southwardi, A. arcuatus, A. dauphinensis, A. lautus and A, pectinellus, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, I. D.

†Diopatrailes conformis, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.

†Eunicites (?) alveolatus, E. angulatus, E. grandis, E. nanus, E. palmatus, E. perplanus, E. tumidus, E. delicatulus, E. serratus, E. subhamellosus, E. placidus, Middle Devonian, S.W. Ontario, Stumun, E. C. & Wright, J. D.— †E. scolatus sp. nov., p. 42 figs., Devonian, Missouri, Sylvester, R. K.

†Glycerites devonicus, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.

† Ildraites anatinus, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.

†Leodicites magnificus, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.—†L. imparilis sp. nov., p. 43 figs., Devonian, Missouri, Sylvester, R. K.

†Lumbriconereites spectabilis, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.—†L. conformis sp. nov., p. 45 figs., Devonian, Missouri, Sylvester, R. K.

†Marphysaitas liratus sp. nov., p. 46 figs., Devonian, Missouri, Sylvester, R. K.

†Nereidavus ontarioensis, N. planus, N. solitarius, N. inornatus, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.—†N. giganteus sp. nov., p. 46 figs., Devonian, Missouri, Sylvester, R. K.

† Nothrites sulcatus, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.

† Oenonites compactus, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.

†Paleoenonites dubius sp. nov., p. 47 figs., Devonian, Missouri, Sylvester, R. K.

†Protarabellites canadensis, P. diminutus, P. excelsus and P. giganteus, Middle Devonian, S.W. Ontario, Stumm, E. C. & Wright, J. D.

†Ungulites spicatus sp. nov., p. 48 figs., Devonian, Missouri, Sylvester, R. K.

#### INCERTAE SEDIS

†Chlamys nuwokensis sp. nov., pp. 104, 120 figs., Miocene, Alaska, MacNeil, F. S.

†Fucusopsis angulatus from the Danian-Palaeocene of Poland, ecology and general study, Birkenmajer, K.

†Gyrochorte carbonaria sp. nov., p. 278 figs., Carboniferous, Germany, Schleicher, L.

5,

†Helicodromites mobilis gen. nov., sp. nov., p. 540 figs., Oligocene, Germany, Berger, W.

†Isopodichrus spec. inq. from Triassic, Jena, formation and modes of occurrence, Müller, A. H. (2).

†Legnodesmus ehlersi proposed as the type of Legnodesmus figured by Ehlers [Palaeontographica 17 1869], Howell, B. F. (1).

†Lockportia, new name for Silurian genus Dactylethra Ruedemann, 1925, type: L. [D.] conspicua, Howell, B. F.

†Nuculana morrisi sp. nov., pp. 104, 120 fig., Miocene, Alaska, MacNeil, F. S.

†Planolites (?) vermiculare sp. nov., p. 651 figs., Carboniferous (?), Germany, Müller, A. H. (3).—
†P. cf. montanus Richter, Carboniferous, Germany, Schleicher, L.—†P. ophthalmoides and P. montanus, Carboniferous, Wurmrevier of Aachen, p. 457 figs., Vangerow, E. F.

†Rhizocorallites gen. nov., p. 409, Helminthoid, type: R. articulare sp. nov., figs., Trias, Germany, Müller, A. H. (1).

Rhizocorallium (?) striatum sp. nov., Triassic, Julian Alps, p. 441 figs., Kühn, O.

†Rhombocorniculum comleyense gen. nov., sp. nov., p. 176 figs., Lower Cambrian, England, Walliser, O. H.

†Ruedemannella, new name for Silurian genus Bertiella Ruedemann, 1925: type-species—R. obesa, Howell, B. F.

†Siphonites heberti, Lias, Chalindrey, Haute-Marne, Gardet, G., Laugier, R. & Lessertisseur, J.

† Tosahelminthes gen. nov., p. 333, type: T. curvats sp. nov., p. 333 fig., Eocene, Japan, Katto, J.



